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DEPARTMENT OF SOCIAL ECONOMY
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MONOGRAPHS

124

AMERICAN SOCIAL ECONOMICS

EDITOR
HERBERT B. ADAMS
Professor in the Johns Hopkins University

ASSOCIATE EDITOR
RICHARD WATERMAN JR.

XVI

INDUSTRIAL BETTERMENT

BY
WILLIAM HOWE TOLMAN PH.D.
*Secretary of the League for Social Service
and
Special Agent for Department of Education and Social Economy for the United States
Commission to the Paris Exposition of 1900*

THIS MONOGRAPH IS CONTRIBUTED TO THE UNITED STATES SOCIAL ECONOMY
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DEPARTMENT OF SOCIAL ECONOMY
FOR THE
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Director
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MONOGRAPHS
ON
AMERICAN SOCIAL ECONOMICS

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- I THE SOCIAL ECONOMY EXHIBIT AT THE PARIS EXPOSITION OF 1900—RICHARD WATERMAN, JR., *of the Department of Education and Social Economy of the United States Commission to the Paris Exposition of 1900.*
- II THE COUNTRY AND THE PEOPLE.—EDWARD D. JONES, *Instructor in Economics and Statistics in the University of Wisconsin, Madison, Wisconsin.*
- III RESOURCES AND INDUSTRIES.—EDWARD D. JONES, *Instructor in Economics and Statistics in the University of Wisconsin, Madison, Wisconsin.*
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INDUSTRIAL BETTERMENT.

INTRODUCTION.

The essential characteristic of the industrial conditions of to-day is the substitution of mechanical for muscular power, whether the source of energy for the machine be supplied by water, steam, electricity or air. Accordingly, inventive genius has lavished its powers on the perfection of the inanimate machine, the inert mass of iron or steel, awaiting only the application of the energizing force of nature to make it perform the complicated wishes of the inventor.

In recent years it has been slowly dawning upon the mind of the employer that his human machines—his hands, as he calls them—need attention, need rest, need the best environment for the production of the best results.

Some employers have improved the conditions under which their men work, because they felt that they owed their operatives something more than wages; they felt that their employees had done the labor share in the production of wealth, and that recognition of some kind was due them for that. Others again improved the condition of their operatives because it paid, in actual dollars and cents, and another class have been influenced by genuine altruism.

Whatever may be the motives of the employer, whether he be influenced by the most sordid selfishness or the noblest altruism, the writer claims that the employee has been the gainer by any improvement in his industrial environment. Especially is this so where the wage earner has had the economic foresight to seize these advantages to perfect himself, whereby he makes himself of greater commercial worth to his employer. His wage earning capacity has been increased, and the tendency is towards a recognition of this fact in advancement or a feeling of security in his present position.

The individual who improves his own condition cannot fail to be of greater worth to the industry, in his own home and in the community, facts which are positive assets in industrial, social and civic stability.

The following discussion will be a study of what employers are doing to improve the conditions of their operatives, whether in the industry in question or in their homes, and finally the effect of industrial and social betterment on the community. Within the brief limits that have been allotted to this monograph, it has been impossible to do more than select typical movements that illustrate the various phases of industrial betterment.

PART I.—THE PLANT.

In a review of what is being done to improve the condition of the employee, the subject will be approached with the central thought that the factory or the work shop is the industrial home of the employee, where he must spend at least one-third of each labor day. Money is spent lavishly, if need be, on the improvement and perfection of inanimate machinery, and some employers are realizing that it will pay them to improve and perfect their animate machines; in other words, improved machines are compelling improved men. The first part of this study will deal with the plant.

Perhaps the first step in Industrial Betterment has been an attempt to adorn the grounds of the factory by a stretch of lawn, dotted with trees and flowers, and the decoration of the buildings by trailing vines. In many cases this may have been done unconsciously, the owner's home grounds having been treated in this way, when the thought came to him that there was no reason why his factory grounds should not be treated in the same way. In some cases the decoration of the grounds of the factory and the buildings has resulted from a deliberate purpose to make the surroundings of the worker as pleasant as possible.

DECORATION OF FACTORY GROUNDS.

The Patterson Bros., in Dayton, Ohio, were led to beautify their factory grounds by the observation of the so-called homes along the line of the railroad. They noted the stiffness and the ugliness of fences, outbuildings, porches and yards, and reflected that much of that same ugliness could be dispelled by the bringing in of beauty. They then decided that their own factory and grounds could be improved, and they tried to do the work themselves. Failing signally, they then called in the advice of John C. Olmstead. The lawn received the first attention.

Several years ago they found that bright interiors, plenty of light, bright colored buff walls in place of dingy ones, painting machinery buff instead of dead black, all seemed to make the shops more cheerful and the resulting work more satisfactory. Then they introduced palms into the factory. Then they said that if it was a good thing to make the interior bright, clean and attractive, it would have a good effect to make the outside the same. They wanted the factory men to have pleasant impressions whichever way they looked, and as the bright buff-colored interiors did not harmonize with dirt lying around the grounds, they cleaned them up and, as a natural step, began to plant shrubbery. Naturally this had a good effect upon the men's interest, improved their health, while they worked better and more cheerfully. If all this was a good thing about the factory, it would be equally applicable to the houses in the neighborhood. Mr. J. C. Olmstead was asked to come to visit the houses and the neighborhood. A stenographer took down his suggestions, so that they combined their own theory and Mr. Olmstead's practice.

The General Electric Light Company in Schenectady have decorated the main entrance to their works with beds of flowers. Boston ivy has been planted about the principal buildings near the entrance. It was suggested by the writer

that markers indicating the common name of the flowers, vines and shrubs, would be of great assistance to the employees desirous of purchasing similar plants for their own homes.

In one Ohio (Dayton) factory the women and girls come to work one hour later than the men, for the sake of avoiding the rush and the crowding of the men and women. In a Rochester factory the girls come five minutes later than the men and go to their rooms by separate entrances. Their work rooms are also separated from the men. In a New York Insurance Company's office, the men and women have their work in separate parts of the room. When the girls in the Ohio (Dayton) factory enter the building to begin their work, they are able to ride up to the various stories on the elevator, thus beginning the day with that amount of saved exertion to their credit; both the girls and men go to rooms where the walls and ceilings are tinted buff, this color having been found to be the most restful to the eye. The New York Machinist Press paint their printing presses with white enamel paint, the men calling them the White Squadron. In every new factory there is no reason why the window space should not be as large as possible for the sake of the greatest amount of air and light, two essentials of health in the performance of the best work. In an old factory the expense of replacing the small windows by large ones is comparatively slight.

✓ Many an employee's work is made needlessly heavy by thoughtlessness that does not provide a comfortable seat, which by no means lessens the efficiency of the work. Chairs with comfortable backs, adjusted so as to conform to the various heights of the users, are provided in the National Cash Register Company. Foot stools are an additional comfort, while in one room the chairs are fitted with an adjustable metal rim, that can be used for a foot rest. The water closets are ample and clean, the wash rooms are remarkably neat; muslin curtains and bits of ribbon enliven the room

with delicacy and color. It was my privilege to suggest to the employer that he fit up spray baths in the basement of his factory for his men. The suggestion commended itself to him, and what was better, he ordered that each man should have twenty minutes a week in the winter at the expense of the Company for a spray bath, and forty minutes each week in summer for two baths. The women are treated in the same way as the men. At J. H. Williams & Company, drop forgers, in Brooklyn, in addition to the spray baths, each wash trough is provided with a douche, so that the workman can thoroughly clean his head from dust and dirt.

IMPROVED MEN FOR AN IMPROVED FACTORY.

In his efforts to attain the highest degree of excellence in hat making, Mr. John B. Stetson, of the John B. Stetson Company of Philadelphia, realized that two problems were involved; one, securing the finest classes of material produced, and the other, obtaining a much higher order of workmanship than was at that time possible to secure. The first problem was the least difficult. Experience in business, well organized connections and an abundance of capital made it not so difficult to obtain the best classes of raw material, but Mr. Stetson was obliged to overcome a much greater difficulty, that of educating labor up to the highest standard of workmanship, so that he might maintain his reputation for the manufacture of the very finest goods. In order to successfully overcome this difficulty he realized that in the first place his mechanics must be of a higher order of intelligence than had been found among hatters; second, that many years of practical experience in the establishment would be necessary before the mechanic could attain the high standard established; and third, that substantial appreciation and fairness in dealing would be essential to encourage the best efforts and co-operation of the employees.

In order to overcome the first mentioned difficulty, evening

- ✓ classes, lecture courses and a well selected library were established, giving every mechanic the opportunity of broadening his intelligence, while a well equipped gymnasium was erected for physical education. As hatters of the last decade were of a roving disposition, which interfered with long continued organization, in order that they might be encouraged to locate long enough at this factory to obtain the standard set the John B. Stetson Building and Loan Association was established, where funds could be borrowed at a low rate of interest for the purpose of building homes. A saving fund paying five per cent interest on deposits was also established to encourage economy among the employees and also as an adjunct to the Building and Loan Association.

Many other clubs and organizations have been organized from time to time to serve special purposes. The Union Mission Hospital was organized originally for the sole benefit of the employees, but through Mr. Stetson's beneficence its doors for many years have been open to the deserving poor who require medical attention.

- ✓ A Sunday school and church, which have very commodious quarters within the factory building, and each of which has a seating capacity of 1,200, were established. The former, having an average attendance of 600, was established by Mr. Stetson to develop the moral character of the employees, as he rightly believed that the mechanic whose moral responsibility is best developed performs the best class of work.

- ✓ It may be truthfully stated that these organizations have performed all that was expected of them, and their influence has not only been felt throughout this manufacturing organization, but has greatly improved the status of the mechanics, a policy which has excited great interest and favorable comment among the great majority of manufacturers who have either heard of or visited this plant. There is no doubt but that the excellent reputation of this firm can be greatly attributed to the high class of labor employed, and this in turn may be greatly attributed to the advantages

given them and the encouragement which has been offered.

THE H. J. HEINZ CO.

A business that started in 1869, in one room in a small two story house in the suburbs of Pittsburgh, has increased to such dimensions in 1900, that its buildings in Pittsburgh cover ten and one-half acres of floor space, that the product of 15,000 acres of vegetable farms constitute a part of the raw material, that there are salting houses in different states, and branch factories, with their own glass plant. Such an Aladdin-like increase is due to more than the mere payment of wages, and in the judgment of the writer, the kindly care and the fair treatment of the employees have been large elements in the success of the business of the H. J. Heinz Co., of Pittsburgh, now employing 2,500 people. The buildings are equipped, not only with every mechanical and scientific device that can be used advantageously, but the health, comfort, convenience and enjoyment of the employees receive the same careful attention.

Thorough organization is maintained throughout the establishment. The day's work is begun by an individual report at the time-keeper's office, a separate building, the portal to the great works. On entering, I could not help thinking what a splendid object lesson the employees received daily, as they glanced at the beautiful stained glass windows on which were depicted the humble origin of the great works, the seal of the city and mottoes inculcating energy, thrift and contentment. Approaching the factory, I found that the open space, covered with turf and beautiful in summer with flowers, was arranged by Mr. Heinz with a view of affording a bit of natural beauty, increased light and air, and better fire protection for the factories on the three sides of the quadrangle.

Pittsburgh being a large manufacturing city where soft coal is burned, presents a dingy, dirty appearance. Mr. Heinz, believing that beauty and cleanliness have a business value,

built his new factories with glazed bricks so they can be washed down by the hose. In addition he has just given orders to reface his old factory with the same kind of bricks.

On entering the factory one instantly notices the trim and tidy appearance of the girls, with their blue gowns and white caps. The sanitary appliances are ample and perfect. There is a commodious dressing room, and each girl is provided with an individual locker. Adjoining these, are bath rooms and a temporary hospital. A special dining room decorated with pictures and plants has accommodations for 500 girls who bring their own luncheon. By the payment of one cent a day the "coffee fund" is created, the firm supplying the kitchens and cooks, crockery, milk and sugar. I find that there is a surplus from this fund, which is used for entertainments and summer outings. In the same room is a circulating library and an organ. At the close of the meal it is customary to have a five-minute talk from a member of the firm, a foreman or some one of the men who will tell the girls about their departmental problems and their relation to the factory as a whole. Visitors are frequently called upon to make remarks.

Christmas 1899, the large hall was utilized for a Christmas festival, when the largest Christmas tree possible was covered with gifts from the girls to each other. The officers and the rest of the force were invited to the festival, and nearly 1000 people attended. Nine gold watches and two beautiful clocks were presented to some of the heads of departments who had been with the firm from six to twenty-five years, and as the other employees left the building on that same evening, Mr. Heinz presented each with a silk umbrella with silver-handle trimmings.

Another building certain to attract notice is a stable of three stories, with accommodations for fifty horses on each floor. All the interior frame work is of structural steel, the floor beams being filled with concrete and cement, with fixtures of iron and steel, so that an absolutely fire-proof build-

ing has been secured. Windows on four sides, those in front of plate glass, make the interior light and cheerful. The stable is heated with steam, lighted with electricity, and provided with the most improved system of ventilation. Foot baths, Russian baths and a hospital are provided for the horses. Automatic mechanism supplies their food and water ; by pressing a button, the water troughs in each stall are filled automatically. The horses are cleaned by electric brushes, and the harness when taken off is conveyed to the harness room by an over-head carrier, where, by a system of switches, it is sent to its appropriate place.

The last building is 180x100 feet, and in addition to the lower floors, which are utilized for manufacturing purposes, a dining room will be furnished for the men. Other rooms will contain arrangements for spray baths and lavatories. In this building is the auditorium on the fourth and fifth floors, with a large stage and gallery. The seating capacity is 2,500. For years Mr. Heinz has wished that the people on the north side of Pittsburgh should have a commodious hall for public meetings, entertainments, and other social affairs, for the good of the community. This purpose will be met by the auditorium, which will be used as well for lectures, entertainments and Christmas festivals for the employees.

On the top of the building there is a roof garden, affording a cool and healthful breathing spot for the employees and visitors, a passenger elevator, with accommodations for thirty, running to the auditorium and roof garden. The plans and arrangements of this building were personally supervised by Mr. Heinz. The auditorium will be used on Sundays for a Sunday school for the employees and the people of the neighborhood.

The park carriage, as it is called, is in constant use during the summer for an outing in the park of those girls who may chance to be slightly indisposed or who may be convalescent.

PRIZES.

Suggestions for improvement, for reducing the cost, for economy in production, or for general management often occur to the man at the bench, perhaps more readily than to others because he is in daily contact with machines and tools. For the lack of encouragement many important suggestions are not reported at headquarters, thereby becoming of no avail in promoting the greater efficiency of the business. Some employers, keen enough to realize this loss, stimulate their employees by offering cash prizes. For example, one firm offered \$100 for the first prize. In 1898 the prize was awarded to a man at the bench whose suggestion of making a slight change in the formation of the head of a screw, saved the company at least \$2.00 a day.

Unfortunately, the workers feel that good suggestions when made are not credited to them, but are reported to the office by the foreman or superintendent, who receives all the credit. To guard against this, and to insure perfect justice for each individual, the National Cash Register Company, of Dayton, Ohio, place in every department duplicating machines. Thus every man making a suggestion is sure that it is credited to him, because he holds the duplicate copy. At this factory the following prizes are announced for the first six months of 1900,—\$615 in cash prizes will be awarded to employees submitting the best suggestions, the amount to be divided as follows :

| | | | |
|-----------------|-------|-----------------|-------|
| 1st Prize - - - | \$50. | 5th Prize - - - | \$20. |
| 2nd " - - - | 40. | 15 Prizes each | 15. |
| 3rd " - - - | 30. | 15 " " | 10. |
| 4th " - - - | 25. | 15 " " | 5. |

By such an arrangement fifty persons will receive prizes ; and even though a suggestion be of minor importance compared with others, the employee submitting it will have a good chance to receive a prize. On the other hand, the first five

prizes offered should be an inducement to each employee to look for defects, and to invent and suggest improvements, with the idea of having his suggestions considered among the best five. For these prizes all factory and office employees (excepting heads of departments and their first assistants) and mechanical inspectors are entitled to compete.

Suggestions may relate to improvements in registers, tools, machinery, systems employed, and to the general management of the business. Employees should submit their suggestions in writing to the Factory Committee, unless they refer to office work, when they should be addressed to the Office Committee. Suggestions may be written on the autographic registers provided for that purpose, or they may be sent by messengers, shop mail, U. S. mail, or left with the doorkeeper.

The A. B. Chase Company, manufacturers of pianos and organs, at Norwalk, Ohio, offer three annual prizes for the best suggestions for improvement on their instruments without increasing the cost; the best suggestions for improvement that can be utilized regardless of cost; and the best suggestions for reducing the cost, or for economy in production without detriment to the quality of the work; and fourth, for the best suggestions not included in the other three classes for improving the business or the condition of the employees.

The above system was begun in 1899. The men were encouraged to offer suggestions freely, and up to the first of the year out of fifty different suggestions about forty were utilized. The distribution was made by the board of directors.

The men are asked to make suggestions and complaints, and small boxes are placed at different places for their convenience in doing so.

"From time to time certain suggestions are made by employees to the management of this Company, which they wish to take up and adjust. The Company is always glad to re-

ceive suggestions or complaints from the employees ; it will be glad to investigate and adjust any that it can. For this purpose we have placed these small boxes around the factory ; and if any employee has any suggestion to make, we shall be glad to have him write it on paper and place it in these boxes. The employee can suit himself about signing his name, but we would much prefer it, and the superintendent will treat all such communications with perfect confidence, and will guarantee that any such will not work to the detriment of the employee, and in most cases will probably work to his advantage. It is the desire of this Company to have the good will of all the employees, and it wishes to adjust all matters to their satisfaction as far as possible.

“Commencing January 1st, we will inaugurate a system of prizes to our employees, and will distribute \$100 in gold every six months until further notice. The money will be distributed in prizes as follows : 1st prize, \$50 ; 2d prize, \$20 ; 3d and 4th prizes, \$10 each ; 5th and 6th prizes, \$5 each.

“This money will probably be distributed at the annual picnic and annual ball of the beneficial association, and will be awarded to any of our employees making the best suggestions for the betterment of this business. It is our belief that our staff, who are in daily contact with the works of this institution, should be able very often to offer us very valuable suggestions for the improvement of our work. These suggestions may be in regard to the management of the business, improvement in tools, or cheapening the method of handling our work, either by machinery or otherwise, and, in fact, anything that will in any way improve the product or cheapen the cost of the goods we manufacture in this plant.

“The competition for these prizes is open to all of our employees, except those employed in the office and those on regular salaries in the factory ; therefore, every employee, be he boy or man, in the employ of this Company, is open to enter into the competition for these prizes, and we would suggest that you make these recommendations in writing ; that is, if you can do so conveniently ; if not, then give them personally to the superintendent, although we would much prefer to have you hand the recommendation in in writing, dating them the day you make the recommendation and signing your name to same. We will immediately file this recommenda-

tion, will acknowledge the receipt of same to you, and at the end of six months will decide which of the suggestions are entitled to prizes, and distribute the money at that time.

"We shall be glad indeed if all of our employees will feel at liberty to make suggestions at any time. We are very certain that you very often see things that you think could be improved upon, and we have no doubt your suggestions will be valuable to us, and we are perfectly willing to pay for them where they are as suggested in this arrangement.

"If this notice is not perfectly plain to you, we would be obliged if you will call our attention to it, because we want every man to understand just what we are attempting to do here, and we want it understood that these suggestions are open to every boy or man in the employ of this company, with the exception before stated."

The F. H. Brownell Company, Rochester, N. Y., offer cash prizes for the best suggestions. For the greater efficiency of the system, and to encourage the men to continue making suggestions, each man receives an acknowledgment, with a statement whether or not his suggestion was original; and if so, that it is placed in competition.

FIRE PROTECTION.

Fire protection is a matter of vital concern to the employee. At the drop forging establishment of J. H. Williams & Co., Brooklyn, N. Y., the fire signal is a continuous blast of both steam whistles. One man with an assistant is in charge of each room; under them are men for detailed duties, giving the city alarm, placing the fire pails on the platform, closing the windows and doors, the monitor nozzle, and the various lines of hose. Each man has one duty, and he is held responsible for its accurate and intelligent performance. The fire extinguishing and protective apparatus is inspected every week. Each workman has a complete description of the general scheme, with details, so that he may know his individual relation to it. The following are the general instructions:

"Each foreman will see that all apparatus in his department is in perfect working order. If a member of the Fire Department is absent, appoint some one *promptly* to take his place. Do not let the Fire Department be crippled by the absence of its members.

"The best way to avoid fire loss is to prevent fire starting. Cleanliness is necessary everywhere; fires do not start in clean places. Let no rubbish accumulate. Use no sawdust. Keep clean waste in the iron cans or tin cabinets provided for it, and burn all oily waste daily. Keep shaft bearings free from accumulations of oily dust.

"Men in charge of hose lines will see hose properly coiled, ready for instant use; that extra spanners and washers are at hand; that nozzles are screwed tight and *everything* always ready for service.

"In case of fire each department will act under its own head, in general charge of Mr. Redfield, Mr. Amborn or Mr. Reeve. Each man will take his own place and do his own work, not another's. Use care with water; it often does more damage than fire. At night leave elevator level with first floor."

"Well done, Tim," "I didn't think you could do that so quickly, Tom," with other words of approval, were overheard at an unexpected fire drill at this shop last August. The previous drill was made six months before, and the proprietor told me that the alarm would be given at twenty minutes before twelve. It was done, and instantly men appeared everywhere, clambering up the ladders to close the outer shutters, shutting all the windows, pulling out seventeen lines of hose and then manning each, everything in complete readiness for a fire. This, however, was the significant part—within five minutes from the signal all the apparatus had been put away and each man was at work in the shop, as energetically as if there had been no interruption, and he did not know that the whistle would blow again fifteen minutes later for the noon hour. This is one of many illustrations, showing that consideration and kindness to wage earners do pay, and that they have a commercial value. No amount of

money could buy such intelligence and loyalty as was shown at this fire drill, but it was secured by the knowledge on the part of the employees that they were regarded and treated by the firm as men and not as hands. The firm gains in the fact that the risk of serious damage of fire is minimized, and it has also the full working efficiency of the men at the bench and at the forge. Thus the identity of interest is shown and maintained.

The A. B. Chase Company, Norwalk, Ohio, provide a waiting room adjoining their office, which, in addition to being supplied with magazines and papers for a reading room, has tables and desks, writing paper, pens and ink for the free use of their employees.

HYGIENE.

It would seem as if no necessity existed for any discussion of hygiene in connection with Industrial Betterment,—that it could be assumed that every employer provided for the health of his staff as a matter of course, as a business proposition, that a healthy workman can do more and better work than one whose physical system does not respond to reasonable demands. The Sherwin-Williams Company of Cleveland, Ohio, were persuaded that a certain amount of sickness among their staff was due to the drinking water in their factory. They said that the above was a preventible cause, and accordingly fitted up, at considerable expense, a plant for filtering all the drinking water in the factory.

The Brooklyn Rapid Transit Company give standing orders that whenever it is cold, hot coffee is to be served to motormen and conductors. If coffee was not provided, it is a reasonable assumption that some of these men would use alcoholic stimulants, with potential danger to the safety of the traveling public and the tenure of the positions of the delinquents with the Company.

The Siegel-Cooper Company employ a physician, at the

call of employees at all hours of the day and night. His office hours at the store are from 10 A. M. to 12 noon.

The Bibb Mfg. Co., of Macon, Ga., employ a physician whose duty it is to attend all their operatives without cost. They state that the mortality among the families is less than when they employed physicians promiscuously. This system is very satisfactory to the firm and more than repays them for the cost. I find that a number of employers provide rest rooms for their staff, where any of the girls and women who are indisposed may retire and have any needed medical attendance. They are generally fitted up with couches, easy chairs and in one instance are provided with necessary simples and what to do till the doctor comes.

HOT COFFEE.

One day Mr. J. H. Patterson, President of the National Cash Register Company, passing through his factory about twenty minutes to twelve o'clock, observed a girl leave her work bench with a pail, which she put on the radiator. Calling the forewoman he asked why the girl warmed the glue on the radiator and not in the usual place. "Glue?" said the forewoman, "That isn't glue, that's coffee." On learning this fact he was impressed in the first instance by the loss of time to him, caused by the girl leaving her work bench twenty minutes before twelve o'clock; and secondly, he said to himself that it must be a pretty poor apology for coffee if it was saved over from breakfast and warmed up on a radiator. On reflection he decided that it would be a saving to him of time and money, as well as beneficial to the girls, for him to provide hot coffee at the Company's expense. This experiment gave so much mutual satisfaction that he next made a few dietary studies of the kind of food which the girls brought and the way in which it was prepared. He found in many instances that there was not enough food and that it was of poor quality. Frequently the food was spoiled in the cook-

ing. Continuing his reflection, he observed to himself, "If my operatives have insufficient or poorly cooked food they are not able to do a full day's work." Then he decided that it would be a saving of money for the Company to provide a warm mid-day meal. An attic in the factory which had served as a kind of store room was cleaned out, large windows put in, and the room freshly painted in cheery colors and fitted up with small circular tables. Now the girls have a dining room flooded with sunshine and good cheer, where a meal consisting of soup, meat, one vegetable, plenty of bread and butter, tea or coffee and one dessert is provided at the expense of the Company. The girls take turns in waiting on each other. The expense to the Company of the dinner, exclusive of the preparation of the food, is about $4\frac{1}{2}$ cents a day for each individual. Mr. Patterson states that under no circumstances, would he return to the old conditions, being convinced that the expense of providing sufficient well cooked food under hygienic conditions and surroundings has been more than offset by the increased amount of work in the departments where the girls are employed.

THE CASINO.

The knowledge on the part of the President of another company employing eleven hundred people, that those who lived some distance from the works were obliged to bring their lunches, which were eaten cold at the work bench, caused him to reflect that a change from the work room to a light, airy, comfortable place would be highly beneficial. Then if this place could be fitted up with tables and chairs so that the lunch could be eaten in comfortable surroundings, and better still, if a hot dinner could be served, the men would greatly gain in health and contentment. From this modest provision for the comfort of his men at their noon hour, his original purpose was expanded to such an extent that when completed his men received a Casino, an industrial club house,

fully equipped. The main hall, 59 x 32 ft., is the dining room where those who bring their lunches may eat them ; adjoining is a room 14 x 15 for the women employees. In the same building the President has a dining room where the officers of the Company and guests are entertained. This establishment, The Gorham Manufacturing Company, (silversmiths) Providence, R. I., has installed a chef at the Casino. The prices charged the operatives are very low ; coffee, tea, milk or sandwiches cost three cents each. All prices are in multiples of three. The number of tickets sold for the months of October, November and December, 1899, was several thousand.

A FACTORY RESTAURANT.

A restaurant was provided for the employees of the Cleveland Hardware Company, who felt the necessity for doing something for their employees. The start was made in cleaning up their factory, which had always been kept fairly clean, because it was absolutely necessary to add more machinery in the departments but there was no place to put it and no room to increase the size of the building. By going over the ground very thoroughly, it was found that by keeping all of the material in perfect order, more room could be gained. The conclusion was then forced upon the firm that it was money in their pockets to keep the plant just as clean as possible. Then came the decision to provide a restaurant, but the great obstacle was the lack of room. The factory was crowded, and every available corner was utilized for the manufacture of goods. However, there was a small room which had formerly been used for an office, between two factory buildings, filling up a portion of a light well. This room measured about 9 x 9. There the kitchen was started, with a gas stove. At first coffee and sandwiches were sold. Extension was very soon necessary ; the old kitchen was abandoned and is now used as a serving room. The new kitchen is extended down the light well about forty or fifty feet, and

measures about 7 x 50, being right in between the rolling mill building and factory. It was impossible to provide any room for the men to eat in, but this was overcome by giving each set of six men or more a folding table, which they keep in different corners of the factory, some hanging them on the wall and some standing them up behind machines and benches. Any set of six men is allowed these tables, and appoints one monitor, but he must not be a man that runs a machine. This monitor can take the order from the other men, and is allowed to take their baskets to the kitchen with their order at eleven o'clock, and these baskets are packed in order. The monitor is then allowed to stop work five minutes before the whistle blows, come to the kitchen, and take the basket to wherever the group has located its table. In this way the great rush at the window as soon as the whistle blows is avoided. All those that do not form sets then come up to the window and receive whatever they order. Four hundred men are served on the day turn, and as a rule, the serving is finished in about ten minutes after the whistle blows.

One of the first obstacles was the dishwashing, but this was overcome by supplying each man with a small porcelain covered pail, for whose care he is responsible.

Little cupboards, divided like cup cases in a barber shop, are set up in the rooms, so that each man has his own compartment. At the start two ten-gallon coffee urns were thought essential and were provided at a cost of twenty-nine dollars each. They are very nice as an ornament, but when a man is serving from fifty to sixty gallons of coffee, time is too important to wait for it to run out of a faucet. Two ten-gallon cans are now used, which cost three and one half dollars apiece. A dipper is used in serving the coffee. At the start there was a gas stove, but a hotel range, the most expensive part of the outfit, was put in at a cost of ninety-five dollars. Aside from this, the furnishings are simply pots and pans of different descriptions, which would probably run

the expense up to another hundred dollars. A pint of coffee is sold for one cent, but at a loss, as the best of coffee is bought and served with cream. If boiled milk was used and a cheaper grade of coffee, it could be sold for one cent a pint. The balance of the bill of fare is as follows: Sandwiches, all kinds, 2c. each; Hamburg steak, 1 slice of bread, 2c.; pork sausage, 1 slice of bread, 2c.; pork and beans, 1 slice of bread, 3c.; half dozen crackers and cheese, 2c.; pie, all kinds, 3c. per cut; tablespoonful of mashed potatoes, 1c.; cooked meats, 1 slice of bread, 6c.; puddings, 3c.; oyster soup (on Friday), 5c. per plate; other soups, 2c. and 3c.

On some of these items there is a small profit, to cover waste. A 12c. pie is cut into five pieces; the Hamburg steaks measure about two inches across. The different articles are served on a paper plate, and with them, a piece of bread.

The head cook is rather a high priced man, because he is so experienced that he can take the entire management on his own shoulders. He is paid \$2.50 a day. A girl is paid \$3.50 a week; these two are on the day turn. They come to the factory at about seven in the morning and stay until four in the afternoon. The night man comes on at half-past five and stays until four in the morning; this man is paid \$1.50 a day, the price for an ordinary cook.

The problem of lunching was very troublesome. Many of the men come away from home in a hurry, without breakfast, and they were lunching about all morning. This seemed almost impossible to stop. When the restaurant was started, the plan of shutting down the entire plant for about fifteen minutes and allowing the men to lunch was considered, but it was abandoned, on account of the large numbers, as it was impossible to serve them in that time. Now luncheon is allowed from 8:30 to 9:30 in the morning; during that hour any man is allowed to leave his work and go to the restaurant, purchase what he wants and eat it. A notice was put up that the men should not congregate around the restaur-

ant, nor should five or six men shut down their machines at one time. This plan has not been abused by the men. The superintendent states that during that hour 250 to 300 men are served, and he never has seen more than four or five men at the kitchen window at one time. There are five different departments in this factory. The superintendent also states that the restaurant pays, and they would not think of giving it up. They believe that a restaurant can be run so as to pay all expenses at the prices given ; but they also consider that they can afford to pay a little bonus to run this, as they are certain that it is a paying investment. The office people also eat at the works. It was found that it was something of a nuisance to have them eating in their offices, so a small dining room was built for them. On account of the scarcity of room this was built on top of some of the warehouse bins ; it is not an elegant affair but answers the purpose.

LAVATORIES AND BATHS.

The Walker & Pratt Mfg. Co., (stoves and ranges) of Boston, believe that care for the comfort of their employees is dictated by sound business, as well as humanitarian, considerations. They find that workmen in a comfortable, well lighted building will do more and better work. They can also secure a better class of workmen when they consider the men's comfort and welfare.

Foundry work is necessarily very dirty, but this firm decided that each one of their workmen may go home clean, hence self-respecting. In the sanitary appliances it was the design that they should be convenient, easily kept clean and repaired with the least delay and effort.

The regular set bowl of the plumber, with its wiped joints on outlet and overflow, is dispensed with entirely. Two substantial cast-iron standards have a plain rectangular slab of iron bolted to them on each side, while central posts support a wooden frame which carries mirrors and a shelf for other

toilet necessities. The wash-bowls are of cast-iron, made in the works and covered with white enamel. Lugs on the under side slip over the longitudinal bar and support the bowl without other fastening. A trough of sheet copper beneath receives the discharge from the bowls and carries it to the outlet at one end, where it falls into a covered gutter in the concrete floor. Thus the whole apparatus is open to inspection and cleaning. Over each bowl is a hot and cold water faucet attached directly to the iron pipe system, so that no plumbing work was required even here. The water pipe system, moreover, is entirely independent of the frame which supports the bowls, so that there is no chance of strains and leaks in the pipe from any movement of the latter. We may add that soap powder canisters are secured to each bowl, a wrinkle of neatness which anyone who has seen a cake of soap in a factory washroom can appreciate.

At this same establishment each molder has his individual bathing compartment in a room 105 x 35 feet. The entire floor is covered with concrete, the water draining to a covered central gutter. The workman stands on a movable wooden grating. Each bathing compartment, 3 x 5 feet, contains hot and cold water faucets, a seat, a pail, and hooks for clothing, while a locker fitted with a Yale lock enables the man to have his ordinary clothing and valuables in security. Overhead incandescent lamps furnish light, and steam pipes keep the room comfortably warm; white paint has been freely used on all the fixtures. One man is in charge of bath and washrooms, so that everything is kept neat and orderly. He has some time left for odd jobs in other parts of the works.

Nearly all the buildings have continuous windows with brick walls up to the window sills, thus insuring the maximum amount of light. The area of glass, including the warehouse and storage buildings, is nearly one quarter the floor area, while in the molding shop, partially lighted by skylights, the area is thirty-five per cent of the floor area. In the molding shop a large proportion of the glass surface is

on the north side, thus affording a soft and well diffused light and avoiding the intense glare of sunlight.

Instead of painting the trusses and structural iron work inside the buildings the conventional "foundry red," the color is a light buff. The roof is painted inside with water paint.

A CLEVELAND FACTORY RESTAURANT.

What I consider a unique idea is being worked out by the Sherwin-Williams Company, paint and color makers in Cleveland, Ohio, who wished to make their factory and every department as clean as possible and have their employees observe strict cleanliness. In most factories slight provision is made for a sufficient number of towels, or facilities for washing them, so this Company decided to make enforced rules for washing. In order to do this a large number of towels were needed, the laundering of which could be more cheaply and conveniently done in their own establishment.

Under the present rules, towels have to be changed at certain stated periods, and the fact that clean towels are so often provided is a great stimulus to employees in using them. At the factory laundry are also laundered the table linens and aprons used in the lunch rooms and factory. The Company also provide bath and wash rooms. It was impossible in an establishment of this size to give either the office or factory employees a very long period in the middle of the day for luncheon. They therefore brought cold lunches, eating them in the shops and warehouses—in fact, wherever they happened to be. The firm decided to better this condition of affairs, and converted two floors into lunch rooms. At first it was thought that it would be enough to provide a clean and suitable place where they might eat the lunches which they had brought, but it was very soon found advisable to provide a kitchen where hot meals should be served. Each day a cup of tea or coffee and one hot dish, either soup or stew, is served free.

There is always a selection of extras sold at cost for those who do not care to bring their own luncheon or wish to supplement what they have brought. The men appoint waiters from their own number, one for each table, serving for a week at a time. The free courses are : Monday, beef stew ; Tuesday, barley soup ; Wednesday, baked beans ; Thursday, vegetable soup ; Friday, oysters, fish or chowder ; Saturday, pea soup. Charges are made for extras. Not only do the employees have wholesome and appetizing food under pleasant surroundings, but they become acquainted with each other, and a feeling of good fellowship results. The president and officers take their meals at the lunch room, and the traveling representatives find here a relief from the usual hotel and restaurant fare. The chef, Uncle Eli, had been twenty-seven years at one restaurant, where he had made a famous reputation with the gourmets of the town. He has two assistants for the manual part, but he personally attends to the cooking. There are so many employees that they cannot all be served at the first table. There is no formality at the meals, but on the other hand there is no rudeness. The men appreciate what is done for them and accept it with entire self-respect.

At the Ferris Bros., in their Newark, New Jersey, factory, where they employ 400 women and girls, bath tubs are provided in the factory with hot or cold water, towels and soap. Oak finishings, nickel plated trimmings, rugs and first class sanitary arrangements make the rooms bright and clean. Each employee is allowed thirty minutes for a bath at the expense of the company.

Each workshop is the size of an entire floor, so that the light comes from four sides through very large windows. White curtains at every window give the factory a home-like appearance, which is still further brightened by potted plants furnished and cared for by the girls.

In the various rooms the company provides hot and cold water, mirrors, towels and soap. Over each wash basin is

this request, "Please help with your forethought to keep things clean and nice. Any attention will oblige, (signed) Ferris Brothers." An hour is allowed at noon, and all are expected to begin work promptly at one. Girls living at a distance from the factory are allowed to leave a few minutes before twelve o'clock. A room comfortably furnished is provided for those who lunch in the building. Every day tea with milk and sugar is provided free by the firm, and oatmeal twice a week. Soup can be bought at three cents a bowl. In comparison with the overworked, round-shouldered, anxious-faced girls of the ordinary factory, these employees are trim, tidy, cheerful-looking, with bright eyes and rosy cheeks.

MONTHLY VACATION.

Among the most unique and commendable movements is that practiced at the dry goods house of A. T. Lewis & Son, Denver, Colo., where two days in each month are allowed women in their employ, with pay, at the time when nature demands rest and quiet. This two days' vacation is given only at these times and for the purpose implied. It is the testimony of this firm that the general health of the women is very greatly benefitted; and although the cost to them during the year amounts to several thousands of dollars, the additional efficiency of the workers and their appreciation of the particular privilege fully offsets the cost. It may be stated that this measure was adopted at the suggestion of Mrs. A. D. Lewis.

FACTORY PUBLICATIONS.

Employers are discovering the advantage of what might be called indirect education—that is, teaching outside of classes and text-books. Whatever takes the employee into the confidence of the employer is of great mutual advantage. One illustration of this is the "Chameleon," a monthly published by the Sherwin Williams Company, of Cleveland, Ohio, for their staff and employees.

This firm considers that enthusiasm on the part of their employees is so much capital ; the Chameleon is in no sense an advertising medium. It contains articles from the heads of the various departments, notes and news of interest, comments by visitors and whatever else will tend to bring the branches of the business and staff into co-operative relationship.

F. A. Brownell, of Rochester, New York, publishes monthly the "Bulletin," as a means of communication between him and his employees. A monthly publication of the same name is issued by the Eastman Kodak Company for a similar purpose. The "N. C. R." is a bi-monthly published by the Patterson Bros., of Dayton.

These publications contain a great many items devoted to the commercial and the industrial side of the business, but the pages also relate the impressions of others regarding the social work at the factory, and bits of information regarding industrial betterment at other factories. A few pages will discuss points of hygiene and make suggestions of home improvement. In this way, the wage earners do not feel that they are merely cogs in the industrial machine, but are credited with human intelligence. Several establishments have one or more bulletins for the public posting of items of personal interest to the employees, and brief statements regarding distinguished persons who may have visited the plant.

Education by means of books is rather universal, employers contributing generously to the support of public libraries. In the case of the public library there is no means of arousing a desire for reading, except by the conventional methods, that is, of having the people go to the library. At the National Cash Register Co., the library is brought to the men, by means of the traveling plan. At noon, a case of books and magazines is wheeled about to different parts of the factory, for the sake of supplying reading matter to those workers who have chanced to spend the noon hour in the fac-

tory. This traveling library has been the means of arousing a desire for reading, which desire receives continual stimulus in the fact that a small building just opposite the factory is a branch station of the public library at the city.

AN OFFICERS' CLUB.

Whatever increases the individual worker's store of practical technical knowledge makes him of more value to himself and to his employer. The more he knows of his particular line of work, the more sure he is of holding his present position. His employer is also desirous that he should remain, for able and honest men are at a premium. The complexity of modern machinery and the delicacy of its operation are demanding workers of a high degree of intelligence, so that they may respond to the increasing demands upon their knowledge. Not only is education in the specialized industry of value, but every opportunity is now being afforded for training in the school of common sense, whose diplomas are based on individual tact and discretion—what the man in the street calls “horse sense.” In illustration of the point is the Officers' Club at the National Cash Register Company, where twenty-five men from the different departments meet for dinner each day at the expense of the company. It nearly always happens that some guest is present or some local celebrity. The primary object of the reunion is social, but to my mind this purpose is far outweighed by the educational, whereby the men come in touch with others from the outside, getting new ideas, new points, which cannot fail to enlarge their mental and industrial horizon.

In the early part of the century the Sunday School was a large educational factor in the community, many of the members learning to read and write there. An interesting reversal to type in many respects is the Factory Sunday School at the same company. The large hall is utilized for the opening exercises, which are like those of the usual school. Many a school has so-called lesson papers which are about as

uninteresting for children as can be imagined. Here the Advance Department of the factory prepares the papers, which are entitled "Pleasant Sunday Afternoons." They are made as attractive as possible by good press work and illustrations. Prizes will be awarded at the end of the year for the best kept set of papers. A large place in each session of the school is made for practical talks and hints that will help the people in the daily life, in the home, the street and the city. One Sunday a talk was given by a city dentist on the hygiene of the teeth. Mr. Patterson has a collection of nearly 7000 lantern slides which he uses in the school to teach art, history, travel, the sanitation of the home, personal hygiene ; just what the wage earner is interested in knowing, will help him to make more of life. Each spring thousands of flower seeds are distributed to the children, who plant and watch them, being stimulated to do their best by generous prizes for the best kept back yards, fences and window boxes. The great difficulty in this, as in other Sunday Schools, is to secure teachers. At this Factory Sunday School the following device was hit upon. Each class has a leader, and the members are requested to bring a quotation, which is read and commented on by the one who brought it ; then by vote of the class, the best quotation for the day is put in the class scrap-book. Towards the close of the session, the selected quotations from the classes are read, and by the vote of the school the best one is put in the school scrap-book. This is practically an automatic teacher. This last summer the sessions of the school were held in the grove of the old homestead of the firm.

One Sunday afternoon lantern slides were used to illustrate and explain the regular lesson for the day. Mr. Patterson then asked the children what other subjects they would like to have taught and they replied, "cooking, carpentry, wood carving, stenography and molding, etc., etc."

They were shown that the basement of the schools should be provided with baths for the use of the children in the day

time and their parents at night. Attention was called to the importance of securing a certain lot, occupied by infirmary buildings and adjoining the Wyoming Street school-house, which the city was about to abandon and sell. The lot is large enough for a cooking-school, a manual training school, and in addition for gardening work such as is provided in France. The children were told that it was their duty to tell their parents to get up a petition to the city to save that lot for school purposes and not sell it; that it rested with the boys and girls of the Sunday School whether this should be done or not, and that they should speak to their parents in regard to it when they went home, and tell what they would like to see on the lot. Then they were shown that if they had training of that kind when they left school they would have an earning power of three or four dollars per day, instead of having a hard time to get work at \$1.50 per day. It was stated that two-thirds of the people who were out of work during the last panic were out on account of ill health, and that this might be overcome by teaching preventive hygiene; and that good cooking would make three dollars' worth of food go as far as six dollars' worth if badly cooked; that the whole trouble lay in bad politics, for ignorant men were elected who knew nothing about these things, to spend our money. To illustrate, a story was told of the sewer which they were going to build, at a cost of \$1,000,000, which was only stopped by sounding the alarm in the newspapers, but not till \$60,000 had been spent. If that sum had been spent in the right way, the boys would have all these advantages. Now they haven't them and must work hard always; whereas, they might have had an opportunity to go across the ocean, and here pictures of Venice were shown, saying that if the boys were successful men they could visit all of these places and see strange sights.

A FACTORY LIBRARY.

V Application was made to the Cleveland Public Library to establish a station at the works of the Cleveland Hardware Company. It was necessary that the firm should first get fifteen of the men to use these privileges. A notice to this effect was posted in the factory, and twenty-four names were handed to the time-keeper within two days. The general superintendent then made arrangements with the library, and before arrangements had been completed these names had increased to thirty-five. The Cleveland Public Library then established an authorized station at the works. The shop carpenter made a book case out of common pine, shel-laced, with glass doors. The library then furnished any books called for, giving a complete assortment of different books, also a file and cards, and, in fact, a complete set of office materials, even to pens, rubber bands, and postage stamps. Any man in the factory hands his name to the timekeeper, and tells him what class of books he wants to read, whether it is fiction, history, travel, or any other kind ; if there is a particular book that he wants, he is furnished with an application card. The catalogues and lists of the library are at the factory, where he can then make application for his book ; if it is not at the station, they telephone to the library. If it is in, the book is laid aside, and the factory team, which passes there every day, stops and gets what books are due. The books are collected in the office once each day and sent to the timekeeper's office, to be given out to the men. Mr. Adams, the superintendent, is so much interested, that he personally does the selecting, and he finds in most cases that the selection is left to him. The records and reports to the library are prepared by one of the young ladies in the office. It generally takes Mr. Adams about one-half or three-quarters of an hour each noon to make the selection of books ; the young lady probably spends another three-quarters of an hour doing the other work, so that this is practically all the

expense there is to the company. In December 327 books were circulated. At present there are 100 men using the library; of this number fifteen are office people, and the balance are from the factory.

The class of reading is shown by the December report :

Biography, 7 ; Philosophy, 9 ; Religion, 1 ; Sociology, 11 ; History and Travel, 72 ; Science and Useful Arts, 10 ; Literature, 4 ; Juvenile Fiction, 1 ; Fiction, 201 ; German, 11.

In fiction, the books are the very best ; in selecting many of them Mr. Adams has pursued the plan of asking different friends and employees in the office to go over their own private library, selecting the best books and giving him a list of them. These lists were sent to the library as applications for books.

To increase interest in the library, the plan of obtaining a permanent library was begun, and to further stimulate the interest and the appreciation of this library, the management have been writing all the prominent people in the country, and, in fact, the world, asking them to donate one book with their signature on the fly-leaf, thus giving an autograph library.

APPRENTICESHIP.

There is a growing feeling among all of the better trades that of late years there has not been a tendency in young men of the rising generation towards apprenticeship and the consequent thorough education. Additions to the number of skilled workmen have been largely from abroad. It is believed that this is a mistake, and that the trades of to-day should and do offer inducements which should attract the attention of many of our bright young men of artistic or mechanical temperament. Some firms believe that the manufacturers can do much to revive interest in the apprenticeship system, not upon the old, rigid lines of binding out, but upon a basis which would more nearly fit the condition of the boys who surround us.

With this end in view, the Gorham Mfg. Co., silversmiths, have remodeled the rules governing the education of boys in the twelve or more distinct trades operative in that factory. The new feature which has been introduced, and which has been received with considerable enthusiasm, is a system of merits or premiums, which are placed within the reach of every apprentice, and which are awarded at the end of each apprenticeship year in accordance with the marking received during that year.

At the end of a term of successful service a certificate is given, which in itself would be an incentive when coupled with the name of a firm of more than local reputation. By the terms of apprenticeship, applicants must be at least sixteen years of age, but not more than eighteen, physically sound, of good, moral character, and have received an education equal to that obtained in the grammar schools of the city of Providence.

Each candidate must serve three months as a term of trial. At the expiration of this period, if he has proved suited to the particular trade to which he desires apprenticeship, a formal agreement will be executed. Apprentices will, in all cases, serve until the anniversary of their apprenticeship following the attainment of their majority and such time subsequently as shall equal the entire lost time during the period of service.

Lost time during an apprenticeship year shall be considered as the difference between the total hours worked by an apprentice and the total hours that the factory is in operation during the same period, exclusive of overtime. A year's service will not be considered as completed, until lost time has been made up. Overtime made by an apprentice will not shorten the year of service, but may be counted against time lost during the same year.

Apprentices will be paid according to the following schedule: For the first year's complete service, at rate of \$3.00 per week, for the second year, \$4.00 per week, for the third year,

\$5.00 per week, for the fourth year, \$6.00 per week, for the fifth year, \$7.00 per week.

In addition to the above rates of payment, premiums may be earned by those who are diligent and efficient in their work, and who by their general conduct exhibit a desire to improve every opportunity to become expert at their trade. The payment of these premiums is entirely voluntary on the part of the company, who reserve the right to pay the whole, a portion, or none at all, according to the record of the apprentice. The eligibility of each apprentice to the above mentioned premiums will be determined by a system of merits and demerits recorded at the office of the company, and will be based upon the following: (*a*) Adaptability, (*b*) Application, (*c*) Skill of Perfection of Work, (*d*) Rapidity, (*e*) General Conduct.

Limit of Premiums: First year, \$25.00, second year, \$35.00, third year, \$50.00, fourth year, \$75.00, fifth year, \$100.00.

Apprentices are required to conform to the rules and regulations which have been or may be adopted for the government of the factory, and the company reserves the right in its sole discretion to terminate its agreement with any apprentice, and also to discharge from its employ any apprentice for violation of said rules and regulations, or for persistent lack of industry, or improper conduct within or without the factory.

The company agrees to give faithful instruction to all apprentices, and furnish them with a proper certificate at the expiration of their period of service.

SCHOOLS FOR STORE BOYS AND GIRLS.

In the commercial house of Daniels & Fisher, Denver, there is a school which includes in its membership as far as possible all children under the age of eighteen. The present enrollment is thirty-eight, twenty girls and eighteen boys. They are divided into six divisions, and these six divisions united into four classes, each class reciting forty minutes.

The school opens at 8.30 and closes at 11.30 A. M., every day of the week except Monday. As this is a very busy day in the store, all school work, with the exception of one class of girls, is suspended.

The course of study consists of arithmetic, United States history, reading, spelling, geography, and the discussion of current events. Each morning the teacher is furnished with the daily newspaper, and takes the most important topics which she can discuss with interest to the children, explaining them and answering all questions. The text books used are the property of the store. Each child is provided with the necessary books with which to prepare the lessons, and is allowed to take them home at night. The text books used are as follows :

McMaster's United States History, Belfield & Brook's Rational Arithmetic, Redway & Hinman's New Natural Geography, Stepping Stones to Literature, Higher grades, Stepping Stones to Literature, Seventh grade.

The school room is provided with all the necessary blackboards, maps of the United States and the world and all other appliances. It is the idea of the proprietor of the store to gradually increase the usefulness of the school, and one of the proposed improvements is to establish a regular circulating library containing books of interest to the children.

Each Monday night from five to six the Cleveland Window Glass Co. have lectures in their store, inviting all their employees who are interested to attend. From fifteen to thirty are present at these talks, which are thoroughly practical in their nature. The firm states that a great deal of good has been accomplished, because these lectures increase the interest and knowledge in the business and enable the firm to come in closer touch with their own men and to judge of their capacity for business. No prizes are offered, but the employees are promoted as fast as they prove themselves worthy of it. The boys are encouraged to attend the night schools, and about fifteen of them have attended the Y. M.



C. A. classes this winter, studying chemistry, mechanical drawing, arithmetic, etc.

ENTERTAINMENTS AND LECTURES.

The League for Social Service was requested by Messrs. West & Simons to suggest and secure the talent for a series of monthly meetings, to consist of illustrated lectures on current topics, with occasional musical entertainments, for the 1000 women and girls in their employ. They were particularly desirous of having the lectures illustrated, for the sake of educating the eye as well as the ear. This same firm have opened a night school, with an average attendance of fifty-five. Classes are started in response to the wishes of a number of students. For example, the last was one in mechanical drawing.

RECREATION.

The general attitude of employers is quite different from that of one who remarked that in his business they used up a man every six years and then hired new ones. Men are saved and not used up. They are beginning to wonder what their employees do with their time outside of their working hours in the factory, how they spend their evenings, what kind of recreation they have and so on. They again realize their identity of interest, for it is far better that the employee uses his outside time so as to make him more ready for work on the morrow, rather than that he should do all sorts of things that will dissipate his strength, energy and moral fibre. Accordingly movements for recreation are of importance.

In a visit to an industry where nearly 4000 men and boys were employed, the superintendent asked for suggestions. I made several ; among others I told him that there was no reason why that open lot belonging to the company just opposite one of their shops should not be enclosed and then fitted up with sand pens for the little children, swings for the

older ones, a wooden shelter or a tent where the mothers could sit if they wished to watch their little ones, and a simple outdoor gymnasium where the boys and men could come after their work. By that means, I said, you show your practical interest in the families of your own men ; you are doing something for them. The children in these families are coming into your shop in a very few years ; how much better for you that their bodies have been somewhat strengthened by exercise, and their minds disciplined by regulated play. Every minute that your boys and men spend in such a way keeps them out of the saloon, with its possibilities of unfitting your employees to do a healthy day's work on the morrow, whereby your business suffers. Then, too, the knowledge on the part of the women of the family that you have done this will be a conservative force, used on your side in the event of a strike or a disposition on the part of the men to any kind of action that will hurt your interests.

Every small park, open space, outdoor gymnasium, swimming pool, roof play ground on the public schools, band concert, popular musical entertainment, is a safety valve for the escape of passion, discontent, unrest, all of which confined would become dangerous to the community. Public recreation should receive the heartiest support of the employer ; in the first place, because it is his duty and the citizen's right to have the opportunity of making the most of life, and recreation occupies a prominent place in this. Any opportunity for humanizing the individual wage earner is a gain for his employer.

EMPLOYEES' ASSOCIATIONS.

Siegel-Cooper's New York store has an employees' association which is a regularly incorporated association, supported by a small graduated tax on the salaries of the members, entertainments and contributions by the firm. In addition to the benefits of insurance, medical attendance and

financial assistance, the girls enjoy at the expense of the company a vacation period of one week.

The steamer Republic every Saturday morning carried eighty girls from the store to Long Branch. The party was in charge of a matron, who saw her proteges safely landed in the Wheeler cottage, where a week of solid, health-restoring enjoyment, free from all financial worry or business cares, was enjoyed. The girls rode bicycles, bathed in the huge salt water rollers, with brave, strong-armed life-savers watching their every motion ; experienced the delights of the gorgeous trolley cars that carried them to Asbury Park, or lounged about the well lighted and artistically arranged gardens of the Wheeler cottage.

Every indoor amusement ever devised was at hand should inclement weather forbid outing trips. Lawn tennis and croquet grounds attracted the athletic girls, while dreamy hammocks and big, embracing, sleep-inducing chairs under the shade of tall trees invited tranquil rest. How the hard-working girls enjoyed this week of rest and freedom can be only imagined, while the strength gained and stored up against the fatiguing demands of the other busy fifty-one can be hardly overestimated.

At the Ferris Bros. factory, Newark, N. J., in connection with the dressing room on the second floor is a room 116 feet long, furnished with a piano ; this affords an opportunity for the girls to sing or dance during the noon hour after lunch. In the same room is a stock of current literature, magazines and periodicals, also health lifts for exercising ; all of which are reserved for the exclusive use of the employees.

The National Elgin Watch Co. provide a gymnasium, which, in addition to a fine hall devoted to athletics, amusements and the like, has a fine auditorium, in order that entertainments, amusements and healthful exercise may be afforded every employee of the factory at little or no cost.

January 4, 1900, the first of a series of annual reunions and banquets was given by the Gus Blass Dry Goods Co.

of Little Rock, Arkansas, to their employees, each of whom was privileged to bring his wife or a lady friend. The formal dinner was followed by a dance.

PARKS AND PLAY GROUNDS.

Hopedale, Mass., where the Draper Company has its works, had a population May 1st of 1400 people. The company's pay roll numbers 2200, showing that a large number of people live in the adjoining towns.

The local corporation and individuals connected with it represent a very large per cent. of the taxable property in the town, so that certain improvements—for instance the grammar school building, the park, the character of the schools, roads, and all matters calling for large expenditures—are, in a certain sense, governed by the local company, although not paid for directly by it.

Under the Massachusetts law, in accordance with certain conditions, land may be set aside for parks. As to the park, the first appropriation in this direction as made by the town last summer, with the land taken, includes 140 acres, nearly the entire shore of the mill pond. There are three different places on the east side of the pond where the land runs up to the town road parallel with the pond, where later on roadways connecting with the park can be easily built. This tract of land comprises some of the finest natural scenery in the town, which is included in it or can be seen from it. There are three very attractive groves, one of them a pine grove with large trees and a fine spring, making a very desirable place for picnics within a little over one mile from the center of the town.

Six acres of the park are located diagonally opposite the school. This lot has been drained, plowed and fertilized for the purpose of a play ground for the children of the grammar school and the others in the town.

The employees have comparatively few places where they can meet for their social gatherings ; the ordinary halls in the city have a high rental, or where low are connected with saloons. The Pattersons allow the use of their factory dining room, under certain restrictions, for social gatherings or dances. The Pope Bicycle Co. allow the use of one of their large rooms. Athletic clubs of all kinds are generally maintained, as well as musical and social organizations. Many firms provide annual excursions for their staff. The Pattersons gave all the boys in their employ, who were members of their clubs, the outing of two weeks in a summer camp near Dayton.

CLUB BUILDINGS.

At Elmwood, near Providence, a club-house was built by President Holbrook, at an expense of nearly \$15,000, for the 1100 employees in the Gorham Manufacturing Company.

The casino is two stories in height, of colonial architecture, with a sloping roof, forming broad verandas. In addition to the dining and lunch facilities, which have been described elsewhere in this monograph, is a thoroughly equipped library. The second story is surrounded by a wide balcony, affording room for additional people at the entertainments in the main hall. There are also sleeping rooms, bath rooms and lavatories. Two of the sleeping apartments are reserved for the use of travelling salesmen or guests of the company. The basement contains the cycle room, with a capacity of 400 wheels. Before that casino was built the men checked their wheels in an old building, each paying ten cents a week to a man to watch them. The new cycle room is equipped with numbered racks, with a man in charge. Arriving at the casino the cyclist leaves his wheel with the attendant, passing through the cellar and out by the entrance facing the factory. On leaving work, he receives his wheel at the side entrance, making his exit by the Earl Street side. The rear of the basement contains a storage room and a wash room fitted

with set tubs. Adjoining this is a fully equipped bath room. The casino is lighted by electricity and gas, and is open at all times to the employees, who have the privilege free. The expenses of maintenance are met by the company.

THE STEEL WORKS CLUB.

The Steel Works Club of Joliet, Illinois, has for its mottoes, "Self help, Politeness toward and Consideration for each other."

This club was organized by the Illinois Steel Co., in order to give its employees an opportunity to help each other. Its object is "the promotion of healthy recreation, social intercourse between members, and to afford opportunity for physical, intellectual and moral development."

The Illinois Steel Co. undertook to pay the superintendent, librarian, to furnish heat and light, and to keep the building in repair, but in addition to the expenditures named, they are now paying the physical director and two janitors. They are also meeting other expenditures, until it is receiving the benefit of the income from \$200,000 of their capital.

It is not enough to equip most completely a club house and then expect it to run automatically, but in some way a large measure of interest and working cooperation must be secured from the employees. A recent statement issued by the club members shows their recognition of the identity of interest.

"It is but right and proper that we should show our appreciation of the efforts of the Illinois Steel Co., and the efforts of those members who are giving their time and cooperation in the interests of this club, by the members generally doing something themselves for the club. It is therefore suggested that those enjoying the privileges of the billiard room should devise some arrangement in order to pay for the re-covering of the tables and the repairs needed.

"We have opened a poll so that our members may vote for the books they desire bought for our library, and it is suggested that some arrangement should be devised so as to meet this expenditure. The dues of the club are not sufficient to enable us to pay anything towards the salary of the employees or the repair of billiard tables, bowling alley, or the purchase of new books for our library.

"There is no class in this club that is self-sustaining. In other institutions of this character, where the dues are two to five times the amount paid by the members of this club, there is an income from some parts of the institution, but not so with this, and we should try and overcome the loss. Let us go to work for our club, improve it and do something for fellow members. The obligation rests upon every man to do something for his neighbor. You should do it for your fellow members of this club."

PART II.—THE WAGE EARNER'S HOME.

Early in the history of the National Cash Register Company, they awoke to the fact that they were losing money every day. Realizing that these conditions could not continue, their awakening led them to investigate the causes of the trouble and its solution. Ignorance, indifference, lack of sympathy confronted them. To overcome these obstacles a point of contact was necessary between employer and employee. A hall was engaged to afford a common ground of meeting, where, by means of talks, conferences and pictures, the employer showed them tactfully and insistently their identity of interest. The key to the whole industrial situation Mr. Patterson stated was sympathy, and on this foundation he proceeded on his work of industrial and social reconstruction. In 1890, having successfully established his new system in his factory, he began to plan how he could help his people to improve conditions in their own homes. Most of the employees lived about the factory in a suburb of the city known as Slidertown, marked by ill-kept streets, unkempt yards, bordering on dirty alleys filled with refuse.

To-day the same people live in the same part of the city, but Slidertown has given place to South Park, rejuvenated and regenerated. On the testimony of a leading real estate agent in Dayton, property in this district has increased from thirty-three to fifty per cent. How was this change brought about? The problem was to help families where moderate wages were earned, showing them how to use their income to the best advantage, and inculcating lessons of cleanliness and thrift, the purchase and preparation of wholesome food, the proper care of children, healthful recreation, and the beautifying of the home.

MODEL COTTAGE.

By way of an object lesson, Mr. Patterson set aside a cottage containing a parlor, bedroom, dining room, kitchen and bathroom ; then he installed a deaconess, who made this cottage her home, which became a kind of social center for the neighborhood. It was his plan that these rooms should be furnished inexpensively, so that prospective couples would know just what they would need for the furnishings of their new home, and what they would cost. These rooms also demonstrated that the selection of wall paper of graceful patterns and delicate designs cost no more than the stiff and ugly ones, and that a carpet could be selected in harmony with the paper and other decorations.

From the fact that the deaconess was engaged to reside here, she was able to give her entire time to the direction and supervision of every kind of activity that might be brought under a department of home making and keeping. To get in touch with the mothers, a Guild was organized for the purpose of counselling and advising with them on home problems. Then too, the fact that they met together socially developed a communal feeling, and made each one feel that she had something to give as well as receive from others. Thus these conferences with the mothers made them realize

their responsibilities in providing attractive homes not only for the children but for their parents.

HOME KEEPING.

Another small building on the factory grounds is used for practical instruction in cooking. Not only are the girls and women taught how to cook, but they are shown how to purchase food stuffs most advantageously. It has been my observation that ignorance, particularly among the wage earners, is largely responsible for extravagance in the purchase of food supplies. For this department of domestic economy a graduate of one of the best training schools has been engaged. By means of tact she rouses the interest of the girls and women, and then shows them by actual demonstration what food values are, and how by care and preparation inexpensive but healthful foods can be prepared most appetizingly. Thus she proves that care in the purchase and preparation of wholesome food saves the family money each week. Instruction is also given in cooking dainty and palatable dishes for the sick. She also arranges the daily bill of fare for the officers' club, and the mid-day dinner that is served at the expense of the company to the girls and women.

BOYS' VEGETABLE GARDENS.

This same company, having noticed the success of the "Vacant Lot Farms" of New York, adapted the idea to Dayton, by setting aside a tract of land belonging to the company and devoting it to the boys in the families of its employees and any others who might apply. This tract was divided into small plots 10 by 130 feet and was called the Boys' Vegetable Gardens. The landscape gardener belonging to the company advised the boys and instructed them in how to plant and care for their crops. In the summer of

1899 not only was this of great value to the community in keeping off the streets the boys, bent on all sorts of potential mischief, but the lads received useful instruction which would last them all through life. There is also the possibility that these boys might receive more than a passing desire for the cultivation of vegetables and flowers by being won over to a love for the cultivation of the soil rather than thronging into the cities already congested. Last year forty-three families were made happy by fresh vegetables and flowers brought from the Boys' Gardens, thus saving that amount of money which the family would otherwise have spent for these same vegetables. The most ambitious utilized their plot several times by a succession of crops. In addition to all this, the boys were still farther stimulated by various cash prizes from \$15 to \$3 each, for showing the best results. Every bit of training inculcating a love for thrift and order is of value to a community, but especially so to employers who have come in touch with the boys, thus gaining an influence over them, developing a capacity and love for work. Later, when the employer is looking for trustworthy young men to add to his working staff, he instantly thinks of the boys whom he has helped to train.

The following crops are raised : Lettuce and radishes, seed onions, set onions, carrots, red beets, peas (two varieties), wax beans, green snap beans, butter beans, early cabbage, early dwarf potatoes, late tomatoes, potatoes, sweet corn (two varieties).

Some of the ground is utilized twice. In addition to the above are planted celery, mangoes, squash, transplanted beets, cucumbers, late cabbage, second crop of sweet corn, turnips and two or three crops of radishes.

John Bower won the first prize two years in succession, not only on the vote of the judges, but by the agreement of all the other boys in the competition, so completely did he surpass them, that there was no jealousy regarding his work. The garden instructor asked him to write a sketch of himself.

" DAYTON, Ohio, Nov. 4, 1898.

MR. SEITNER,

Kind Friend :

Received your letter a few days ago and was rather surprised you asked my age. I was 14 years old the 4th of July ; was born at 135 Fairground Ave., and still live there with my aunt and uncle ; went to school seven years and passed for High School, and as my uncle was out of work so long, my aunt could not afford to send me to High School, but would have liked to. I am now working at the ' German Newspaper Co.' I can't work myself up here because I can't read German. I think the boys' gardens is one of the best things there is. If they are interested it learns them how to work and cultivate the ground and many other things. I enjoyed working in my garden and think they are worth their weight in gold. I would like to take another garden next year but I am working and would be too old. You asked me what I do evenings ; on Tuesday I go to the ' Club,' and Wednesday I go to drill. Other evenings I generally go to the N. C. R. Library and read awhile or else stay at home. On Sunday I go to Sunday School in the morning, and in the afternoon I go to the N. C. R. Sunday School. Among the books I have read are ' Travel in Europe,' ' Life of Napoleon,' ' Life of Columbus,' ' Gorilla Hunters,' ' Franklin in the Woods,' ' Wreck of the Golden Fleece,' ' King Arthur's Round Table,' and a lot of others which I can't remember. I am now reading ' Two Arrows.' The papers I have read are ' Youth's Companion ' and the ' Young People's Weekly ' and I enjoyed them very much. I have told you all so I will bring my letter to a close.

Good Night, Your garden boy, JOHN BOWER.

CHILD TRAINING.

The N. C. R. House, or as it has been called, the house of usefulness, is a center for a large share in the work of home keeping. This manufacturer, in common with others, interprets the word home very broadly, and does not confine its efforts to its four walls. He considers that whatever he does to improve the father, mother or child element in the

home is important in social and industrial welfare. I find accordingly that he lays especial stress on the kindergarten, employing three trained kindergartners. The classes meet in the ample rooms, where the mothers are always welcome to visit and inspect the work in progress. When recess comes the children are turned loose on the broad expanse of the factory lawn, where they can romp and shout to their heart's delight. The kindergarten, especially in the industrial quarters of the community, is of immense significance to society, because it is the vestibule through which the child enters upon the acquisition of those ideas which will largely shape his after life. The lessons of order and neatness, the discipline of regulated play, the education of the eye in the harmony of color and the training of the ear in rhythmic music are acquisitions, making the child of greater value to himself, and, if he can follow up the good start which has been made for him, tending to make him of greater wage earning capacity, to say nothing of the enlargement of his powers of general appreciation of what is within his grasp.

A COMMUNAL HOME.

On the hills sloping up from the Hudson near Scarborough are the Briar Cliff Farms, eight thousand acres, where the proprietor operates model farms and dairies. For those of his unmarried employees who were obliged to board at various places and live comparatively isolated lives, he planned a communal home containing seventy individual bedrooms. The building is one hundred feet long and four stories in height; the men enter a large hall, 30 x 30 feet, which, when not used for meetings and entertainments, serves as a smoking room. The high ideal embodied in this room is illustrated by a series of striking mural mottoes:

"God hath given thee to thyself and saith, I had none more worthy of trust than thee; keep this man such as he was by nature, Reverent, Faithful, High, Unterrified, Unshaken of Passion, Untroubled."

"Speak gently—it is better far to rule by love than fear."

"If a cobbler by trade, I'll make it my pride
The best of all cobblers to be,
And if only a tinker, no tinker on earth
Shall mend an old kettle like me."

"Teach us to be kind before we are critical, and sympathetic before we condemn."

To the right of the hall is a large parlor and reading room, provided with books, newspapers, magazines and games ; to the left a commodious dining-room, private dining-room and kitchen. Upstairs, in addition to the bedrooms are handsome bathrooms, with shower and douche baths for the use of the men.

The house was opened Christmas day, 1899, Mr. Law presiding and remarking that he hoped that this building would prove a happy home for the men and would manifest the cordial cooperation between employer and employee at the farms. Additional inspiration was afforded by a quartette from the Briar Cliff Orchestra, organized by the employees.

The National House, as it is called, provides accommodations for one thousand operatives of the National Elgin Watch Co., Elgin, Ills., at dinner, and affords well furnished, well ventilated, steam heated rooms for several hundred young ladies and gentlemen who preferred such a home to that of boarding houses about the city. These excellent accommodations, both meals and rooms, at the National House were furnished upon a basis of cost which made a very important reduction in the prices of boarding, and at the same time greatly improved the service received by operatives in every part of Elgin.

The hotel is fitted up with all modern conveniences from cellar to attic in the most perfect manner, and as now completed the building, or buildings, make an imposing appearance. Its generous proportions and its equipment will be better understood from the statement that the dining-room

measures forty feet in width by one hundred and fifty feet in length. All of the rooms are furnished with steam heat and every modern convenience, particular attention being given to ventilation. Enough rooms are provided to accommodate 350 persons with a cosy and comfortable home within 500 feet of the factory entrances. Besides this the hotel has spacious corridors, large parlors, a well-stocked library free to employees, and a well equipped billiard room.

INDUSTRIAL SETTLEMENTS OR COLONIES.

Industrial Villages or Colonies like Port Sunlight and also those of Essen are well known. In this country Vandergrift, Hopedale and Peacedale are fairly typical of the plant belonging to the industrial question and the aggregation of workingmen's houses, schools, churches, halls and club houses. The advantages of such settlements as the above result in a communal feeling and a strong neighborhood attachment; the community is self contained and the identity of interest between employer and employee is ever present, particularly if the wage earners can have some share in local self government.

The employees of the General Electric Light Company of Schenectady, N. Y., found great difficulty in obtaining comfortable homes for themselves and families. Those available were poorly located and not in the best sanitary condition—in fact the house and surroundings were generally undesirable. In one instance known to the writer, a young engineer, just married, was offered a fine position with this company at a salary that was perfectly satisfactory. On going to Schenectady to see what arrangements he could make for securing a comfortable home, he found that most of the houses were occupied by the owners themselves. It was impossible to rent a house such as he wanted in a desirable location—in fact the prospect of securing such a home as he desired for his young wife was so unpromising that he decided not to

accept the position. This was a loss not only to the company but to the community, the former losing a good engineer and the latter a good citizen.

This company has become so large, with a pay roll of 6000 people, that the decision was forced upon them to undertake the provision of suitable homes for their heads of departments, superintendents, clerks and foremen. They succeeded in purchasing a tract of seventy-nine and one-fourth acres in the north-eastern part of the city, accessible to the trolley running by the property. This tract is beautifully situated on high ground, well timbered, through which a winding stream makes its way. The grove and stream will be utilized by the landscape gardener for a park for the community. It is the company's plan, if this colony proves a success, to secure other tracts and develop them for the rank and file of their men, who may thus be able to buy smaller lots and build inexpensive homes.

LUDLOW.

The property of Ludlow, Mass., was started originally as a small cotton mill in 1824. After more or less success and various changes of ownership, it was finally organized in 1868 under the title of the Ludlow Manufacturing Company.

Of the original mill buildings none remain, the oldest mill now existing having been built in 1878. The mills, shops, engine and boiler rooms contain over fourteen acres of floor space. The warehouses cover six acres of ground, and are connected with the railroad and mills by three miles of tracks and sidings, served by two locomotives.

It has been the aim of the corporation to make the village an attractive place in which to live. Apart from philanthropic motives, they believed that by so doing they would be able to attract and keep permanently a superior class of operatives.

The various cottage plans are the result of several years of careful study and experiment. Each cottage as built has

been planned to remedy some defect in a previous plan, to incorporate some improvement suggested, or to lessen the cost of construction. The tenants have been asked for criticisms and suggestions, which have been acted upon when approved. Different families have different ideas. Some prefer stairs opening from the kitchen, some from a front hall; some wish bathrooms upstairs, others downstairs, etc., etc., hence a variety of plans substantially of the same size and cost.

In planning these houses, the following considerations have been constantly in mind: economy of room; economy in heating; economy of work in care of house and children; largest available amount of sunlight; economy of cost; simple and well proportioned outlines.

The four room half cottage plan has been found very popular for young married couples, and answers their requirements until they have two or three children, when they change to a single five or six room cottage.

When the corporation first bought the property there were but two streets, containing a church, a single room school house and a few old-fashioned tenements. During the last thirty years, the corporation have laid out and built three miles of streets, and have partly constructed a comprehensive scheme for sewage. They have constructed at their own expense the water works, gas works and electric light plant, lighting the village streets without charge. They own the church, school house, masonic hall and all except a few of the houses in the village.

It was originally intended to encourage private ownership of cottages, but after several sales were made it was deemed undesirable, except for small farms outside of the village. While the original purchaser might be satisfactory, the property was liable soon to pass into undesirable hands, and restrictions as to pig pens, hen yards and other nuisances, not having been incorporated in the deeds, could not be en-

forced, as in the case of the company's cottages. The cottages sold have been bought back as opportunity offered.

Until recently all cottages were supplied with an outside woodshed and privy—making a most unsightly array of sentry boxes through all the back yards of the village. In all the new construction, the shed is attached to the cottage and the privy replaced by a water closet either with or without a full bath room equipment.

SCHOOLS.

In 1878 the village contained one ungraded school with a single teacher. The increase of operatives in 1878 required two additional teachers in temporary quarters in the church vestry. The company then decided to build and own the school house. Accordingly, a school house containing six class rooms, a lecture hall and school parlor was built and rented to the town at the nominal sum of \$100 a year. The management had hoped to introduce instruction in cooking and sewing, but it was not favored by the town school committee. Considerable friction arose between the corporation and the town authorities in regard to the management of the school. Finally the corporation refrained from making any attempts at improvements in the school work, but continued to give the use of the school house, and until within a few years have paid a quarter of the salaries.

The old school house has been outgrown and the corporation expect soon to build a larger new one, remodelling the old one into a club house and institute for their employees. Most perfect harmony now exists between the corporation and the town officers, and it is believed that suggestions in regard to the management of the school would be welcomed.

In 1878 the addition of a large amount of machinery in a country village required the immediate construction of a large number of houses, and the continued growth of the business since has necessitated a steady increase.

COTTAGE BUILDING.

The first houses built were planned by architects more with reference to outside appearance than to meet the conditions required by the people who were to live in them, but of recent years the management have made a careful study of the whole matter, in order to provide, at the least possible cost, cottages which will meet all the requirements.

The result of the first attempts at individual cottages seemed to be failures. The cottages were too expensive and the tenants did not take proper care of them. A number of old-fashioned tenement houses were then built, some with eight tenements to a house. These proved even more unsatisfactory than the single cottages and but few of them were built, another and successful attempt being made to introduce single houses. At the present time no houses are built with more than two tenements, and these only for the sake of securing economy in building four-room tenements, for newly married couples, separate front and rear doors being always provided.

In 1878 the corporation fitted up a few rooms in an old building as a library and reading room, with a small number of carefully selected books. In 1888 a new library was erected as a memorial by the widow and children of the late Treasurer. This library building was given to the town under certain restrictions. At the same time the corporation presented to the town all the books belonging to their library, and have since paid for additions of books as well as all salary and maintenance expenses.

The library now contains 3,660 volumes, and thirty-four magazines are to be found in the reading room. The patronage is fairly satisfactory and is increasing, and the building will probably continue to meet all the requirements of the town.

In order to add to the attractions of the village, in 1892 a hall was built for the local Lodge of Masons. The upper

story was arranged for their sole use and so as to suit all the requirements of the order, while the lower floor was arranged for social gatherings of the Masons and other societies or fraternities in the village. This building has been in constant use and is an unqualified success.

LIBRARY.

When the first library was started in 1878, a room fitted out with various small games was set apart as a smoking room, but it became so disorderly that after several forcible ejections the room was closed. During the succeeding years the general tone of the village improved, and in 1895 the attempt was again made. An unused part of a new mill was fitted with bowling alleys, pool tables and other games. This was in every way successful, but was finally closed, as the space was needed for mill purposes. Provided they can secure the interested cooperation of their employees, the corporation hope soon to establish a permanent and well-equipped club-house and working men's institute.

They also hope that the young men of the village will take such an interest in outdoor games and general athletics, as to warrant the laying out of a field for their use and grounds for match games with neighboring teams.

The corporation have long wished to organize a brass band in the village, and there is now good promise of this being accomplished.

The management have always felt that much good could be accomplished in a manufacturing village by instruction in cooking, and they started such a school under a teacher from the Boston Cooking School. Two classes were formed from among the wives of the overseers and leading men. As nearly all did their own cooking, it was decided to have the classes prepare a regular dinner to which each member could invite one guest, generally the husband. The classes

were fully appreciated, and resulted in better cooking and more sociability.

The advisability of starting a corporation or cooperative store at Ludlow has been discussed several times, but in view of the competition of three stores in the village and easy access to a large city, it was not deemed advisable.

A cooperative store has been suggested by the operatives, but has never been favored by any of their leading men in whom the management placed confidence, and consequently has never received support or encouragement.

In the early history, an attempt was made to interest some of the leading men in becoming stockholders, but it did not prove satisfactory and the shares were bought back by the treasurer. While they believe that profit sharing can be successfully applied in many industries where skilled labor is the great factor, the management are not convinced that it is desirable where almost all the labor consists of unskilled machine tenders, and where the profits depend mainly on successful buying, selling and management, and the perfection of plant and machinery.

THE WESTINGHOUSE AIR BRAKE CO.

The Westinghouse Air Brake Company, of Wilmerding, Penn., where their works are located, purchased a tract of land adjoining the factory. It was their thought to give each employee an opportunity of owning his own house and lot. This tract was divided into lots, which were sold at cost. There was a ready response from the employees. To assist the men still farther, the company undertook to build their houses. By means of large contracts, at cash prices, it was estimated that the employee saved from \$300 to \$500 on his house, the company giving them this extra advantage.

Furthermore, the payment for the house and lot was spread over a term of ten years, or 120 equal monthly

payments in the nature of rent, based on the purchase price. The monthly payment included interest and life insurance premiums on a policy to clear the property in case of the purchaser's death. On the fulfillment of the above conditions, the company agreed to deed the property free of incumbrance.

The company also agreed, on the payment of 70 per cent. of the original value of the property by the purchaser, to deed the same to him and accept a first mortgage as security for the balance.

The life insurance feature protected both the employer and employee, for the policy was taken out in the name of the company. As the payments ceased at death, the policy cancelled the expense of the house to the company, and the deceased's beneficiaries received the deed free to the property.

Interest at the rate of five per cent. for average time was allowed any one who might desire to anticipate payments, thus encouraging the thrifty. The lots were 40 ft. in width and from 100 to 200 ft. in depth.

The most expensive house with lot cost \$3775, and consisted of a parlor, dining room, kitchen and hall on the ground floor, with four bed rooms and bath upstairs. The lowest price house and lot was \$2100. There is a parlor, dining room and kitchen, with two large bed rooms on the second story.

Seventy-five houses were built in accordance with the plan in 1890, and thirty-six of these are now owned by the original purchasers. The business depression of '92-'93 made it very hard for the payments to be continued, so a modified plan was adopted, by means of which a mortgage was taken on the property at five per cent. a year, with opportunity of reducing the principal in quarterly payments. Up to Dec. 30, 1899, on thirty-six houses, the principal due was \$65,050, but this has been reduced during the same period by

\$6,057, leaving a balance of \$58,993. The smallest reduction of principal was \$70 and the largest \$600.

Altogether the company has 106 single frame houses, renting from \$22 to \$14 a month.

There are twenty-four double houses renting at \$18 a month ; two rows of six houses, each renting at \$16 and \$18 a month, and four blocks of flat houses, each house containing two apartments, or twenty families to a block. The monthly rentals are \$13 and \$14 each, according to location. These flats are adjoining the works, and are very desirable for residences.

Another interesting case of town development appeared in 1886, when the Apollo Iron & Steel Co. obtained control of a plant at Apollo, a small industrial town about forty miles from Pittsburgh. Prudence and good management compelled annual extension, but the firm were always at a disadvantage in that they could not build with a plan. The buildings were old, were too small, so that it was almost useless to put in modern machinery ; however, business grew steadily until the issue was no longer to be dodged, " Shall we re-make Apollo, or shall we begin from the very bottom a new town, which may be planned along lines of the most progressive social and industrial development ? " The latter course was decided on.

In 1895 the new town to be known as Vandergrift consisted of acres of fields and meadows, beautifully situated on the broad sweep of the river, with a background of wooded hills. While the new mills were building it was imperative that homes for the workingmen should also be built, so that, just as soon as the mills were completed and in operation, the force could go to work without the loss of a single day. It was no small undertaking to house comfortably a thousand workingmen and their families. The company displayed wisdom and forethought in planning a town which should have the most improved system of sanitation and pure and

ample water supply, paved streets and concrete sidewalks, gas and electricity.

In the first place the physical basis of the town was planned on lines of natural beauty by Mr. H. L. Olmstead ; accordingly winding streets, a village green or common, frequent open spaces for shrubs and flowers, relieved the stiffness and ugliness of the ordinary town.

A constant water supply was secured by artesian wells on the hills ; a complete system of sewers and drains made the town clean, for cleanliness means health ; the streets were brick paved, the sidewalks concreted and the little triangular spaces were planted with shrubbery. With their splendid water supply there is no need for wells, which are often the cause of malaria and typhoid fever ; in fact there are no wells. Then, too, each house is provided with bath room and water closet, doing away with unsightly outbuildings. Vandergrift is not merely a mill town ; nearly every man owns his own house, and time is devoted to taking care of its people by its people.

The President, Mr. George C. McMurtry, in the course of conversation stated that they already had good men when they began Vandergrift, but they needed more. He knew of no way so sure for getting a steady supply of good men, after giving them work and paying them well, as to help them a little. In his judgment no other help is so wise as giving the men a chance to help themselves. Based on this social and industrial philosophy, residence lots averaging 25 x 125 feet were offered at \$750 to \$1050 for inside, and \$1500 to \$2500 for corner lots. This price was based on the average sales in Apollo from 1890 to 1895. While these prices were high, it must be borne in mind that all improvements, viz., paved streets and sidewalks, water and gas connections and sewer connections made on the very lot are included in the initial cost. The owner, therefore, has no additional expense of assessments for improvements that are needed at uncertain periods and unknown rates, since at Vander-

gift the only additional expense is that of the house. The only restriction which the deed contains is that no liquor shall be sold on the premises for 99 years. This experiment of selling land without restrictions to the employees will be watched with much interest, because it is contrary to the usual practice.

A school with accommodations for 200 pupils was built by the company. A bank with a capital of \$50,000 was organized. A large tract in the center of the town was given for a village green, and a smaller tract for a hospital and a casino. In addition, the company was very liberal in providing for the spiritual and moral needs of the town by giving any religious denomination the land, and by contributing half of \$15,000, which sum was fixed as the minimum cost for construction of the edifice. There are now five churches in Vandergrift.

While the churches provided for a great amount of social intercourse, the company felt the necessity of providing for the larger social needs of the community, especially in the winter season. The casino which is just built, at an expense of \$30,000, contains an auditorium for people, and a stage. In one wing of the building are the library and reading rooms, and in the other, rooms for the local magistrates and court rooms. The ground floor of one wing is used by the fire department.

About twenty miles southeast of Pittsburg in an air line, on Pigeon Creek, an industrial colony is now building by James W. Ellsworth, who has acquired a tract of some twelve thousand acres of coal lands.

The development of the purely commercial side of the enterprise led him to plan for a town or community where the miners might own their own homes; accordingly a tract of between five and six hundred acres has been set aside for this purpose. While the general outlines of the plan are pretty well defined, they are necessarily subject in small respects to the determination of matters of detail, which have

not yet been taken up and settled, and which may to some extent call for modification of the general plan.

The houses, however, will be of brick, one and two story, perfectly plain or colonial in architecture, with about a quarter of an acre of ground, or 75 x 130 feet, with each house. The house and lot will be sold to the miner at cost—taking into consideration life insurance, if desired, the improvement of streets and possibly to some extent other general expenses—or in the neighborhood of seven to eight hundred dollars, price payable as rental at the rate of about twelve dollars per month, with contract (which will also provide that every property owner is to bind himself to allow no liquor or alcoholic drinks to be sold on his property) that if the lessee retains the place for a stipulated period, so the total rental will cover principal and interest at six per cent. of the purchase price, deed is to be given.

If it can be reasonably accomplished, it is the intention to have the contracts provide for a term policy of life insurance on husband or head of the family for such amount as will amply cover deferred payments, so that in case of death prior to the end of the contract period the family or heirs will own the home.

The general plan of the town will be winding streets, macadam roadways twenty feet from curb to curb, four feet for tree planting space, and four feet for gravel walk on either side, or the total width of street thirty-six feet, osage hedge and house set back six feet from the latter, giving room for the planting of perennial plants.

Two churches are to be built, Catholic and Protestant, public school building, with ample provision for night school; club house, containing library, reading room, billiards and bowling alley, for which a small fee will be charged that members may feel a proprietary right, and an athletic field. The hospital and general store are to be managed on the cooperative plan, the profits to be divided among the miners; however, it may be found preferable to rent or sell lots to private mer-

chants. The government of the town or borough is to be in the hands of the property owners.

Mr. Ellsworth states that it is his intention to provide every benefit with which an employee can be supplied. On the other hand, the cost of producing coal must be made as low as it can be made legitimately. He says he believes in those combinations of similar interests which are known as trusts. When these combinations are made on business principles and are honestly administered, the result is a great cheapening of the commodity produced. Then follows what has always followed—introduction of labor-saving devices, demand multiplied by cheapening the cost, and the field of labor widened. Every combination or trust must work for this end, no matter what is the class of business, if it hopes to succeed.

It is a business principle which cannot be disregarded, that to cheapen the cost to the lowest possible fraction, having a due regard for a fair return on capital invested, multiplies the demand, and profits increase with the volume of business. Volume of business is the measure of real success—a small return per ton on a large volume of business. If these combinations, as complained, displace employees, it shows that these employees are no longer necessary in that line and are a tax on the public. Their seeking of new opportunities will open new fields of industry, and a greater measure of prosperity will follow.

THRIFT.

The Ludlow Manufacturing Company, Ludlow, Mass., was instrumental in starting a Savings' Bank under the State law in 1888. Since then they have provided the banking rooms free of expense, and for several years one of their clerks acted as treasurer. For the sake of avoiding criticism, they refrained from being connected in any other way with the management; their master machinist being the only other

representative employee. The bank has been successful in every way. In December the deposits were more than \$100,000.

ASSOCIATION FOR THRIFT.

What might be called the conventional method is the benefit association, where a certain sum is paid in each week or each month by the employee. In some cases a certain sum will be added by the firm, one of their immediate staff having the custody of the funds. It is always better when the organization and administration can be managed by the wage earners.

The penny provident bank, as it is called, is an excellent method for helping the boys and girls to save their pennies, nickels and dimes. The capital of the bank is a certain amount of stamps, in denominations of 1c, 2c, 3c, 5c, 10c, up to \$5. \$20 worth of the stamps is recommended for an initial working capital. The depositors are given a card on which the stamps are posted. At any time the cards are cashed by a return of money equal to the value of the stamps on the card. When the stamps amount to \$5, it is suggested that a savings' bank account should be opened.

The system is equally applicable to adults, although it is more in use among children. By some operatives the penny bank is used to help them set aside small sums for the purchase of a ton or so of coal, rather than a bucket or a sack. It is a splendid system for saving small sums.

In 1892 the Proctor and Gamble Company at Ivorydale, Cincinnati, Ohio, instituted a plan for loaning money to any employee who might wish to purchase the common stock of the company. The company is advised of the intention of the employee, and the stock is bought for him in the open market. A deposit of \$10, at least, is made, and the difference between the cost of the share and the amount he pays is loaned him at four per cent. per annum. He is given two years in which to pay his loan. One hundred of the

employees are stockholders in the company and own over a thousand shares, which at present market value amount to over \$400,000.

A Building Association was incorporated in August, 1887, with an authorized capital of \$500,000. It is conducted by a board of nine directors, all employees of the Proctor and Gamble Co., and elected by the share holders of the Building Association. There are now 450 share holders, 390 of whom are simply depositors, the other sixty being borrowers upon real estate security. Of these sixty, thirty are employees of the company, who are paying for their homes in the association. It is estimated that since the incorporation of the association there have been sixty of the employees of the company that have obtained homes through its agency. There is \$1500 in the reserve fund, as security against contingent losses, of which in the history of this association there have been none. Some of the members of the association, employees of the Proctor and Gamble Co., have as much as \$2000 deposited to their credit. Many others use the association to accumulate savings, in order to pay for stock of the Proctor and Gamble Co., which they have bought and are paying for by installments.

A pension fund, one-half of which is contributed by the company and one-half by the employees, enables any of them disabled by ill health, old age or accident to secure a pension. At present there is only one pensioner, who is unable by reason of disability to earn full wages. The pension fund accordingly pays the difference between the former wages and that which he now receives. In addition to this any shares of profit sharing [dividends refused employees on account of their carelessness, misconduct or lack of interest are turned into the pension fund.

At the Ferris Bros., Newark, N. J., Friday is pay day. By this means the families have the benefits of the Saturday markets, being able to buy with cash instead of on credit.

Among the institutions for promoting thrift are benefit or mutual aid associations. The general principle of them all is the same, with variations necessary to local adaptations ; as a typical association, that of J. H. Williams & Co., Brooklyn, has been selected. This has stood the test of several years, and was founded on the successful daily experience of other associations in factories, railroads and department stores. The strength of this organization has been tested by several cases of very long continued illness, by a number of deaths which happened to come very close together, and by voluntary withdrawals by employees, who have been refunded a portion of the dues which they have paid. In spite of these facts, and that the association has always had sick members to sustain, the funds have steadily increased, and it has been found practicable to engage a regular physician on an annual salary.

To encourage thrift, and to enable their employees to become actively interested in the company, the Illinois Central Railroad offered to obtain for its employees shares of its stock, one at a time, at current market prices, to be paid for in monthly installments in such a manner as will suit their convenience, allowing them interest at the rate of four per cent. per annum on their deposits for such purchases, as well as the option at any time of cancelling their application for the purchase of shares and withdrawing their deposits for the same with accrued interest.

On the first day of each month the company will quote to employees, through the heads of their departments, a price at which their applications will be accepted for the purchase of Illinois Central shares during that month. An employee is offered the privilege of subscribing for one share at a time, payable by installments in sums of \$5 or any multiple of \$5, on the completion of which the company will deliver to him a certificate of the share registered in his name on the books of the company. He can then, if he wishes, begin the purchase of another share on the installment plan. The

certificate of stock is transferable on the company's books, and entitles the owner to such dividends as may be declared by the Board of Directors, and to a vote in their election.

Any officer or employee making payments on this plan will be entitled to receive interest on his deposits, at the rate of four per cent. per annum, during the time he is paying for his share of stock, provided he does not allow twelve consecutive months to elapse without making any payment, at the expiration of which period interest will cease to accrue, and the sum to his credit will be returned to him on application therefor.

Any officer or employee making payments on the foregoing plan, and for any reason desiring to discontinue them, can have his money returned to him with accrued interest, by making application to the head of the department in which he is employed.

An employee who has made application for a share of stock on the installment plan is expected to make the first payment from the first wages which may be due him. Forms are provided for the purpose, on which the subscribing employee authorizes the Local Treasurer in Chicago, or the Local Treasurer in New Orleans, or the Paymaster or the Assistant Paymaster to retain from his wages the amount of installment to be credited monthly to the employee for the purchase of a share of stock.

In case an employee leaves the service of the company from any cause, he must then either pay in full for the share for which he has subscribed and receive a certificate therefor, or take his money with the interest which has accrued.

The foregoing does not preclude the purchase of shares of stock for cash. An employee, who has not already an outstanding application for a share of stock on the installment plan which is not fully paid for, can in any given month make application for a share of stock for cash at the price quoted to employees for that month, and he can in the same month, if he so desires, make application for another

share on the installment plan. Employees who want to purchase more than one share at a time for cash, should address the Vice President in Chicago, who will obtain for them from the New York office a price at which the stock can be purchased. Any employee desiring to purchase stock (except in special purchase of more than one share for cash) should apply to his immediate superior officer, or to one of the local treasurers.

THE PLANT AN OBJECT LESSON.

Industrial betterment has a wider scope than its influence on any particular establishment. Its wider application is the fact that it becomes an object lesson not only for the trade, but for the local community and the city. A factory where sympathy is the practice between employer and employee becomes talked about; it is known that the men are kindly treated there; workers want employment in that kind of a factory. Instinctively a high standard is set up, and a reputation is established for a kind of industrial Utopia. Illustrating concretely:—at the National Cash Register Company, where so much has been done to decorate the factory grounds and buildings with vines and flowers, the employees, by example and precept, have been permeated by the desirability of natural beauty. Accordingly, each employee living in districts away from the factory has become a kind of missionary, preaching and applying the principles of vine and flower beauty to his own home. Thus the city gains. A city fire engine department, about half a mile from the factory, planted flowers around their building. The owner of a factory cleaned up his premises, painted out the hideous advertisement on his fences and contributed to good citizenship by making his factory remarkable for its neatness rather than its ugliness.

Whatever promotes better feelings between capital and labor is a positive social asset. The influence of kindly

treatment becomes known in a community, almost as widely as tyrannous or oppressive acts.

At the above establishment there are guides employed for the express purpose of showing people about the factory. The social work is sure to appeal to even the most indifferent, and reflection certainly will deepen the casual impression.

It became known to the factory people that a certain part of South Park near the factory was to be improved by cutting down a knoll. The removal of this knoll would have meant the destruction of several fine old oak trees. When these facts became known to the factory people they instantly realized that the destruction of these trees, which had been old landmarks, would be an irreparable loss to the beauty of the park. Hastily assembling in a mass meeting one noon, they presented their collective protests so successfully that the Park Commissioners rescinded their order, thus saving the trees for the city. This concerted action would never have been possible if the people had not been educated to a sense of appreciation of landscape effects.

Adjoining the factory neighborhood was a district near Rubicon Creek, rather unattractive in appearance, with no advantages of clubs, kindergartens and classes for the children. It was Mr. Patterson's idea to improve this part of the city in the same way as the factory grounds. The first step was to dignify the suburb by a new name—Rubicon. Two cottage buildings were moved there and became a centre of usefulness. Graded streets, cement and cinder sidewalks, the laying out and beautifying of lots, planting of trees, shrubs and vines, kindergartens for the children, culture clubs for the boys and girls, improvement and outdoor art associations were started. June 3rd, 1899, the people of the neighborhood were invited to a lawn party in the grove belonging to the old homestead of the Pattersons. One part of the program were illustrations by means of lantern slides showing what other communities had ac-

complished for local improvement, and presenting simple suggestions for carrying out similar plans for Rubicon. During the summer the Patterson homestead grounds were open to the children of Rubicon, South Park and Oakwood. Three hundred and twenty-five children were enrolled under the instruction of four teachers and four assistants, who maintained classes in clay modeling, painting and charcoal drawing, sewing and nature study. The boys enjoyed tugs of war, quoits, baseball, foot races, flag races and all out door sports.

COMMUNAL INFLUENCE.

Among the best illustrations of the communal influence of a movement for industrial betterment is that of the Peace Dale Manufacturing Co., whose business can be traced back to the early part of the century. Peace Dale is a village of about 1500 inhabitants in Rhode Island. The various village organizations are not in the formal control of the company, but in nearly every instance they have been started and maintained by the members of the corporation.

The fact that the stockholders of the corporation have always lived there and have been a part of the village life itself, has been a useful factor in the growth of the place.

As early as 1854, the village children were taught singing in the village school on a week-day afternoon, and gathered into a Sunday School on Sunday by one of the owners and his wife. In 1856 a large building was put up, with accommodation for the library founded two years earlier, a reading room, and a hall in which a church was organized. These rooms were used until 1872, when the church was built, and till 1891, when the library was moved to its present quarters. Most of the organizations named below are thus village, rather than company matters, but at the same time the company, its owners, and employees, practically make up the village.

The Hazard Memorial harbors most of these organizations, containing a library of about seven thousand volumes, a hall seating six hundred people, several class-rooms and a gymnasium. The building, of stone and wood, is an important part of the village architecture, and cost about \$50,000. The building was erected in 1891 to the memory of Rowland Gibson Hazard.

The library is maintained in the interest of the whole town, and is managed by a board of directors that represent the different villages. It is used principally by Peace Dale and Wakefield, and in the summer is drawn upon by Narragansett Pier and other near-by summer resorts. It is entirely free. It has not only the library proper, but a reading room, which is open during the season until eight o'clock every night. The library is supported by funds that have been given to it from time to time, and contributions from various interested people. The town has within the past year for the first time made an appropriation for books.

The Choral Society was organized some ten years ago, and has grown to be one of the leading features of Peace Dale. A conductor comes from Providence once a week during the season for the chorus of seventy-five to one hundred voices, who make up the membership of the society. They give three concerts each year, and have done some very good work, as "The Elijah" a few years ago, Rossini's "Stabat Mater," and several other things of a similar rank, including "The Creation" and Sullivan's "Golden Legend." This Choral Society has not only helped the village in itself, by giving concerts and affording the singers of the place an opportunity, but it has an indirect value in developing the local musical talent, as shown in an excellent church choir, and especially in what are called the Sunday Musics.

The Choral Society is formally organized, the members paying three dollars each per annum. There is an admission fee to the concerts, but the whole sum realized from these

sources is not sufficient to carry on the work, and the deficiency is made up by the owners of the mill property.

A few years ago the Sunday musics were begun by Miss Hazard and her sister, who went into the hall on a Sunday afternoon and played and sang for fifteen or twenty minutes, while a few people from the outside straggled in. From that, it has grown to be an informal concert each Sunday afternoon for the season, from November until Easter. The various Sundays during the time are allotted to musical people in the village and town, each one providing a programme that will take from half an hour to an hour. The music is not wholly sacred, but it is attractive to the people of the village and town, who come in large numbers, and the hall very frequently contains from 250 to 600 on a pleasant Sunday afternoon. The musicians are almost entirely local, though once in a while there is some first-class performer from the outside. There is no organization, and no charge of any sort connected with this work.

The Sewing Society has two rooms upstairs in the building, and meets every Saturday afternoon during the fall, winter and spring. This also is without formal organization, and is carried on by the wife of the President of the company and a number of other ladies in the village. The girls are divided into classes and are taught the practical art of sewing. Twice a year the hundred pupils are given a little spread and a frolic.

The Boys' Room was started some five years ago, and is a very simple affair. The membership is confined to boys under sixteen nominally, although there are a few over that age who came in several years ago, and have continued to come. The boys are the village boys, mostly the sons of mill operatives. They come at half-past seven o'clock Friday evenings, and stay until nine o'clock. They are divided into two parts, and sent down, one part at a time, to the gymnasium, where they are instructed and led in gymnastics by some competent person. The other part is

kept in the rooms above, where there are games and reading matter, and a few are drawn into classes in arithmetic, sometimes in stenography, or in any study in which sufficient interest is shown to gather a class. It is the idea of the club that the boys may be helped by association with refined and orderly methods. Eight or ten people come regularly to help carry on the work. There is no charge of any sort in connection with this organization. At the end of the year the boys are treated to ice-cream and cake and a general good time.

There are also in the building some special classes in manual training. One class in carpentry numbers from eight to ten boys, who are mostly sons of mill operatives. They are furnished with tools by the Trustees of the hall, and charged five cents a lesson to cover the cost of material. The instructor is a village carpenter of unusual skill, who gives his time. In the basement of the Memorial Hall there are a gymnasium, several bath rooms, and a smoking room. These are appropriated by the Athletic Association, which consists of some thirty or forty young men who each pay two dollars and a half per annum for the privilege of using the apparatus and the bath rooms, the money being applied toward the expense of maintaining the gymnasium. Any deficiencies are made up by the Trustees of the hall. The work is under the care of the superintendent of the Memorial Building, who collects dues and maintains order.

The village supports a Literary Society, which meets every two weeks during the season, from October to May. It is regularly organized, and was begun a good many years ago. The entertainments are not wholly of a literary character, consisting of lectures, concerts, and dramatic performances, but are largely contributed by local talent. One concert of the Choral Society is included as a regular number in the Literary Society's course. One night a year is given up to issuing a number of the South County Magazine, which is rather a unique production of this society. Though called

a magazine, it is a manuscript, and is simply read, and illustrated by living pictures and drawings. The membership consists of all those who buy season tickets, the charge amounting to about ten cents per night.

In the Memorial Hall several local circles of the King's Daughters, branches of the regular organization of that name, hold their meetings. About one hundred and fifty women and girls belong to these circles, and sewing, both making and mending garments, and knitting, etc., is done. One circle owns a sick room outfit, bedside table, rolling chair, and other articles of use in sickness, which are loaned as occasion requires.

The hall in the Memorial Building is for the general use of the people of the village, but is not let to any traveling show or organization, or for entertainments that are not considered by the Trustees to be for the better interests of the village. The rental to such people as can hire it is nominal. It is also used for fairs and concerts for special town purposes.

In the village is another building containing a reading room, which is regularly organized and is patronized by the young men entirely. This club is called the Peace Dale Reading Association. The dues are about two dollars a year, which go toward buying newspapers and periodicals. Any deficit is made up by the President of the Peace Dale Mfg. Co. A room and lighting are furnished them free of charge for meetings at all times, smoking, playing cards, or entertainments.

The Peace Dale Manufacturing Company inaugurated, a number of years ago, a system of profit sharing with the employees. The only other general work in this line that the Peace Dale Company undertakes is the cultivation of a spirit of fairness and just dealing with its employees, and making the tenements and the village generally as attractive, pleasant, and healthful as possible.

The owners of the property think that the efforts which they have made, extending now over a long series of years, have aided in bringing about a cordial feeling among all parties who work for the company, and in raising the general morale of the village. Certainly Peace Dale has a body of very efficient and steady help, and the changes among the employees are small. A number of families have been here for several generations, and the company has never experienced any serious labor difficulties.

THE DRAPER CO.

Fourteen houses were built four years ago on a tract of about thirty acres of unimproved pasture land, which was laid out by Warren H. Manning, landscape gardener, the layout being for the entire piece of land. A loop road was laid out and built by the town.

The houses were all built on the oval enclosed by the road, giving opportunity to build the same number of houses on the opposite side of the street whenever the company was ready, without any extra charge as far as either roads, sewers or water supply is concerned. These houses, as well as all others owned by the company, are supplied with water furnished by the local water company, a private enterprise.

The sewer system is constructed, managed and paid for entirely by the company. Where the sewer passes buildings owned by other parties, they have always been permitted to connect with it by paying what represents an actual pro rata share of the cost.

Returning to the lot of fourteen double houses : the road built by the town was constructed in the most thorough manner ; macadamized, curbed, paved and concrete sidewalks put in. The land where the houses stand was entirely re-graded, and these buildings represent an investment, outside of the value of the land itself, but including cellars

and other expenses, of from \$4,000 to \$4,500 for each double tenement.

At the end of the oval piece of land, where there was opportunity to obtain a back yard view in approaching the oval road, a small planting of quick growing shrubs and trees was put in, which has already made a good screen, fully answering the purpose intended.

These tenements are rented on the basis of three dollars per week per tenement; that is, six dollars for a double house, the company paying from this amount the amount charged for water by the water company. In such houses as are provided with furnaces, there is an additional charge of fifty cents per week to cover this expense. Each house contains about the same quantity of room, although the interior designs are quite different. There is a parlor or living room, with good-sized hall, in nearly all cases being connected with the living room by a wide sliding-door.

There are also dining-room, kitchen and good sized pantry on first floor, these last three rooms having hard wood floors. On the next story there are three sleeping-rooms and bath room for each tenement. There is a good sized store room in attic, and the cellar is thoroughly drained and cemented.

At the rear of the house, each tenement is provided with clothes reel and garbage can, and special attention is called to the fact that these back yards are as well kept by the tenants as the front yards. The garbage cans through the season are taken care of at the expense of the company. Through the winter, ashes are placed in a pile where convenient and carted away by the company in the spring. The houses are all built of wood, and nearly all of them contain two tenements each, the division being made vertically through the center.

In regard to class of tenants occupying the settlement there is no classification, except that as these are among the best, they are not let to tenants who seem likely to be un-

desirable, but they contain people working in various parts of the premises, office or other parts of the work, who as a matter of course are people earning more than the average amount of wages, as otherwise they could not afford to live in these houses.

The church was completed about one year ago, and was built by Messrs. George A. and Eben S. Draper, of the company, as a memorial to their father and mother, the late George and Hannah B. Draper, who were among the old residents. This church was presented to the parish by the Messrs. Draper.

The Town Hall was built by the late George Draper, but was not quite completed at the time of his death. It was his intention to present it to the town, and when completed it was given to the town by his children. This building contains the usual town hall, which is provided with stage and scenery, so that it can be used for dramatic entertainments and other matters of local interest. In the first story is located the post office, and up to within a short time the town library. There are also rooms for town officials, caucus hall, store and a market. This building cost nearly \$40,000.

The High School building was built within a year or so after the town of Hopedale was set off from Milford, it being thought that, although a small town, it could provide better High School accommodations than to pay tuition to another town. This building was built by the local corporation and donated to the town. It is constructed of wood, well lighted and with good appliances throughout, and including furnishing cost fully \$7000 above the land. The town in this case furnished the land only.

The Town Library was dedicated December 1899. This building cost \$20,000 to \$25,000, and was built and given to the town by Mr. Joseph B. Bancroft as a memorial to his wife, the late Silvia W. Bancroft. It is a beautiful building

in every respect, and contains all the most improved appliances for library and reading room.

WHAT MORE THAN WAGES.

In modern business there is little room for sentiment ; the ordinary employer demands a cash equivalent for each dollar paid out. The situation is reflected by the commercial proverb, "Business is business." But here and there employers are beginning to realize that investment in manhood pays ; that improved men for improved machines have economic value, because a more vigorous man can do more work, a more intelligent man will do more intelligent work and a more conscientious man will do more conscientious work.

"I want machines so simple in their operation that any fool can run them," remarked an employer the other day. The fool machines may be run by the fool workman, but the employer will have the monopoly of the folly of such an industrial policy. Improved machines demand improved men to run them.

"What more than wages" is an industrial question that is being asked by men, some of whom feel that the labor share of their wealth production should have a larger reward than the mere payment of wages ; other employers are sufficiently far-sighted to recognize that whatever makes the worker more human, more contented, more skilled, is a positive industrial asset in the business and is a large factor in industrial stability.

Unfortunately a lack of sympathy too often prevails, especially towards the rank and file—"hands," as they are called. In an industrial community, word was brought to the local clergyman that one of the workmen had been severely hurt. The clergyman jumped on his wheel, hurrying to see if there was anything which he could do. On his way, he met the owner of the mills, who asked him where he was going in such haste. On learning that he was bound for his own

works to render what service he could to the injured man, the owner remarked, "Oh pshaw! there is no need of your doing that; he is only a damned puddler!" As long as any employer regards any one of his employees as so much trash, not recognizing that the workman possesses like sensibilities as himself, as long as the employer lacks sympathy, as long as he fails to acknowledge certain inalienable rights, just so long will this condition of injustice lead to bitterness and indifferent work, all of which tend to widen the breach between capital and labor.

When there is sympathy on the part of the employer, and its realization on the part of the employee, their interests become identical, and they show it by the response that they give. In a New England department store the work began at 8:30 A. M. and closed at 5:30 P. M. It was the custom of other firms to begin at nine and close at six, the half hour before nine o'clock bringing very little trade and the half hour before six a fairly steady flow. This firm believed in the identity of interest and showed their sympathy in a great variety of ways, believing that the more closely they could manage their business on democratic lines, the greater would be their success. A meeting of the employees was called, and the question of changing the hours was left to their decision. Bear in mind that the half hour before six was very highly valued by the women and girls, as it gave them opportunity for comfortably preparing for home before the rush on trains and cars, and evening entertainments. Although they realized what closing at six would mean to them, several said at the meeting that they did not want their firm to lose the half hour's business, which otherwise would go to rival stores. When the vote was taken it was found that a decided majority were in favor of closing at six.

The New Industrialism has for its guiding principle, Prosperity Sharing. One captain of industry believing in this principle writes me, "What I have done I planned, not on the basis of charity or philanthropy, but on the principle that

what my employees received was their rightful share, and when they were in my works they made full and ample return. I am therefore sharing the prosperity of my business with those who have helped me make it." Another employer said to me, "My employees have done a large share in producing my wealth, and I owe them some recognition of that act."

Prosperity sharing, therefore, provides for the all round development of the worker, not only providing him with hygienic and comfortable workrooms and surroundings, but through education, recreation, making him a better member of the community, a more intelligent citizen and a stronger supporter of the Commonwealth.

Not from the churches, not from the universities and colleges, not from the common schools, but from the hands of the great captains of industry who are recognizing and providing for the all round development, the character of the plain people is being moulded and shaped along lines of civic and social usefulness. Never before in the history of the world has the employer had such colossal opportunities for guiding and uplifting the thousands of men and women, who spend at least a third of each working day in his employ. If employers realized that they held within their grasp the possibilities of industrial contentment, social stability and communal welfare, they would plan and scheme how to improve the conditions of their employees with the same zeal as they now devote to promoting the efficiency of their business, extending its operations and reaching out for the acquisition of new commercial territory.

Granted a desire on the part of an employer to do something to improve the conditions under which his people work or live, how shall he get the necessary information? He wants to do something, but does not know how much it will cost him, is afraid that he will not succeed, that his efforts will not be appreciated, and that once the start is made he will need some one to help him keep it going. All these

queries are natural, and the difficulties that accompany them have effectually prevented many an effort for industrial betterment.

✓ The League for Social Service in New York is collecting photographs, diagrams, reports, documents, whatever is being done by employers for employees. Accordingly when the president of a large iron company wrote to inquire regarding the provision of open air baths and swimming pools for his miners, this organization sent him photographs of swimming pools, referred him to those who were managing them, so that he might get the very latest details as to the cost of administration and operating, and sent him a report covering the general subject of public baths. If he had desired, the society could have sent a representative to study the situation at original sources and then give him expert advice on every phase of the subject. It is practically a great clearing house of all kinds of facts and movements for improving industrial conditions.

An employer doing a business of half a million asked the writer if he could commend to him any young man or woman, preferably some one just graduated from college, hence of trained intelligence, who could go into his establishment with the status of a social secretary, for purpose of advising, by personal contact with the working staff, so that the employees could be made of more value to themselves in the first instance, and to their employer in the second. Last spring the writer was asked if he would entertain a proposition to go with a large concern, about to start a plant in the suburbs of a large city. The firm wished some one to take the general oversight and planning of all kinds of movements that would tend to improve the conditions of their employees, in education, recreation, sanitation, and so on.

After an inspection of a plant where nearly 4,000 men are employed, the Superintendent asked for suggestions looking toward industrial betterment. I gave him several that were

perfectly obvious. "Why," he replied, "we can't give the time to following up those points. We are too busy; we must do our own work." "Of course you are too busy," I said, "and for that very reason you need some one on your staff whose sole business will be the planning and direction of movements to improve industrial conditions; in other words you need a social engineer." Social engineering is a new profession.

Does it pay? is a question sure to be asked by every employer, and by pay he means an equivalent in dollars and cents, quite independent of any satisfaction that he is doing his duty, in the fulfilment of moral obligations to his employees. On this point, moralization and speculation are futile. Sentiment weighs but little with the business man; what he wants are the cold facts on which he can base his own deductions.

The Cleveland Hardware Co., testified, January, 1900:

"Although we believe that what we are doing is most practical and philanthropic, our company does not feel that it is a philanthropy, but a good business proposition. We believe that the manufacturing plant of the future will not be designed without arrangements being made for club rooms, dining rooms, bath rooms, and similar conveniences, for its employees, and we are contemplating putting in all of these ourselves, for we realize that the cooperation and good will of our employees is money in the company's pocket."

In response to the question, Does industrial betterment pay? Mr. John H. Patterson writes, May 3, 1900:

"What many of my business associates have characterized as sentimental—namely, baths in the factory, prizes for suggestions, landscape gardening, pleasant Sunday afternoons, lunches for the girls in the office, boys' gardens, and our various clubs—cost us about \$30,000, or three per cent. of our annual pay roll, \$1,000,000.

"We buy physical and mental labor. If it pays to take care of a good animal that only returns physical work, how much more important is it for the employer to take care of the employee returning both physical and mental labor.

V "We believe that people are a part of all they have met ; that is, all they have seen and all they have heard is absorbed by them, and it therefore pays to have good influences and surroundings for them. We have tried both plans, and believe that the three per cent. of our annual pay roll which we spend on movements for industrial betterment yields us approximately between five and ten per cent. profit in actual dollars and cents. The morale, the example and daily lives of our employees, are influences that refuse to yield to statistics."

When well known and successful firms such as these testify that Industrial Betterment does pay, should not unbelieving firms make a careful study of the situation from the view point of good business forethought. It is my conviction, based on observation and a knowledge of the facts, that the trend of the new industrialism is creating new economic and social environments, so that every firm will be obliged in self-defense to bring itself in line with this forward movement. The hardy pioneers in Industrial Betterment, who had the courage of their convictions and the perseverance to carry out their plans in spite of the criticism of their associates and the opposition of their friends, richly deserve the splendid success that attended their new economic policy.

BIBLIOGRAPHICAL NOTE.

As very little literature in book form exists on the subject of industrial betterment, the information has been secured from personal visits, correspondence with superintendents, general managers, individuals of firms, references to the files of the daily press, occasional magazine articles, and publications which have been issued by employers for their own staff. "A Dividend to Labor," by Nicholas P. Gilman, contains chapters summarizing many American movements for industrial betterment.



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